ORDER NO. AD0303062C0
A2

Service Manual

Turntable System

SL-1210M5GE
SL-1210M5GEB
SL-1210M5GGN
SL-1210M5GPP
Colour
Black Type: SL-1210M5G

SPECIFICATIONS

Specifications

TURNTABLE SECTION

Type:	**Quartz direct drive Manual turntable**
Drive method:	**Direct drive**
Motor:	**Brushless DC motor**
Turntable platter:	**Aluminum diecast Diameter 33.2cm (13-5/64”) Mass 1.7kg (3.74lb.)**
Turntable speeds:	**33-1/3 r/min, 45 r/min**
Variable range pitch:	**±8%, ±16% (two settings)**
Starting torque:	**1.5kg-cm (1.3lb-in)**
Build-up characteristics:	**0.7s. from standstill to 33-1/3 r/min**
Braking system:	**Electronic brake**
Wow and flutter:	**0.01% WRMS* 0.025% WRMS (JIS C5521) ±0.035% peak(IEC 98A Weighted)**
Rumble:	**-56dB (IEC 98A Unweighted) -78dB (IEC 98A Weighted)**

***This rating refers to turntable assembly alone, excluding effects of record, cartridge or tonearm, but including platter. Measured by obtaining signal from built-in frequency generator of motor assembly.**

TONEARM SECTION

Type:	**Universal**
Effective length:	**230mm (9-1/16”)**
Arm height adjustment range:	**0-6 mm**
Overhang:	**15mm (19/32”)**
Effective mass:	**12g (without cartridge)**
Offset angle:	**22°**
Friction:	**Less than 7 mg (lateral, vertical)**
Tracking error angle:	**Within 2°32’ [at the outer groove of 30cm (12”) record] Within 0°32’ [at the inner groove of 30cm (12”) record]**

Stylus pressure adjustment range:	**0-4g**
Applicable cartridge weight range:	**3.5-13g**
	11-20.5g (including headshell)
(with auxiliary weight);	**9.5-13g**
	17-20.5g (including headshell)
(with shell weight);	**3.5-6.5g**
	11-14g (including headshell)
Headshell weight:	**7.5g**

GENERAL

Power supply:	**AC110-127V/220-240V, 50Hz (E,EB,GN)**
	AC120V, 60Hz (PP)
Power consumption:	**15W (E,EB,GN)**
	14.5W (PP)
Dimensions (W×H×D):	**45.3×17.2×35.5cm (17-27/32”×6-25/32”×13-31/32”)**
Mass:	**11.7kg (25.74lb)**

Note:
Specifications are subject to change without notice.
Mass and dimensions are approximate.

⚠ WARNING

This service information is designed for experienced repair technicians only and is not designed for use by the general public.
It does not contain warnings or cautions to advise non-technical individuals of potential dangers in attempting to service a product.
Products powered by electricity should be serviced or repaired only by experienced professional technicians. Any attempt to service or repair the product or products dealt with in this service information by anyone else could result in serious injury or death.

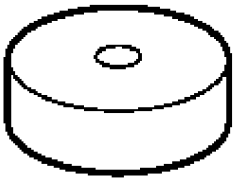
Technics

1. Accessories

- **Disc slip sheet set (RGS0005Z-1)...1pc.**

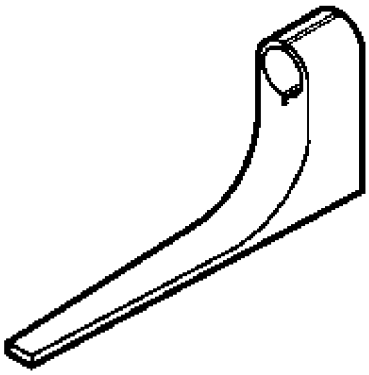
- **Disc slip sheet**
- **Transparent sheet**
- **Auxiliary weight (SFPWG17202)...1pc.**

- **EP record adaptor (SFWE010A)...1pc.**



- **Shell weight (SFPZB3501)...1pc.**

- **Overhang gauge (SFK0135-01)...1pc.**



- **Nuts (RHN26003)...2pcs.**
- **Screws(short) (SFCZV8801-1)...2pcs.**
- **Screws(long) (SFPEV9801-1)...2pcs.**
- **Washers(SFPEW9601)...2pcs.**
- **Sticker (RQLC0142-1)...1pc.**

2. Controls

3. Turntable system pitch adj. slider replacement instructions.

4. Safety Precaution

(This "Safety Precaution" is applied only in U.S.A.)

1. Before servicing, unplug the power cord to prevent an electric shock.

2. When replacing parts, use only manufacturer's recommended components for safety.

3. Check the condition of the power cord. Replace if wear or damage is evident.

4. After servicing, be sure to restore the lead dress, insulation barriers, insulation papers, shields, etc.

5. Before returning the serviced equipment to the customer, be sure to make the following insulation resistance test to prevent the customer from being exposed to a shock hazard.

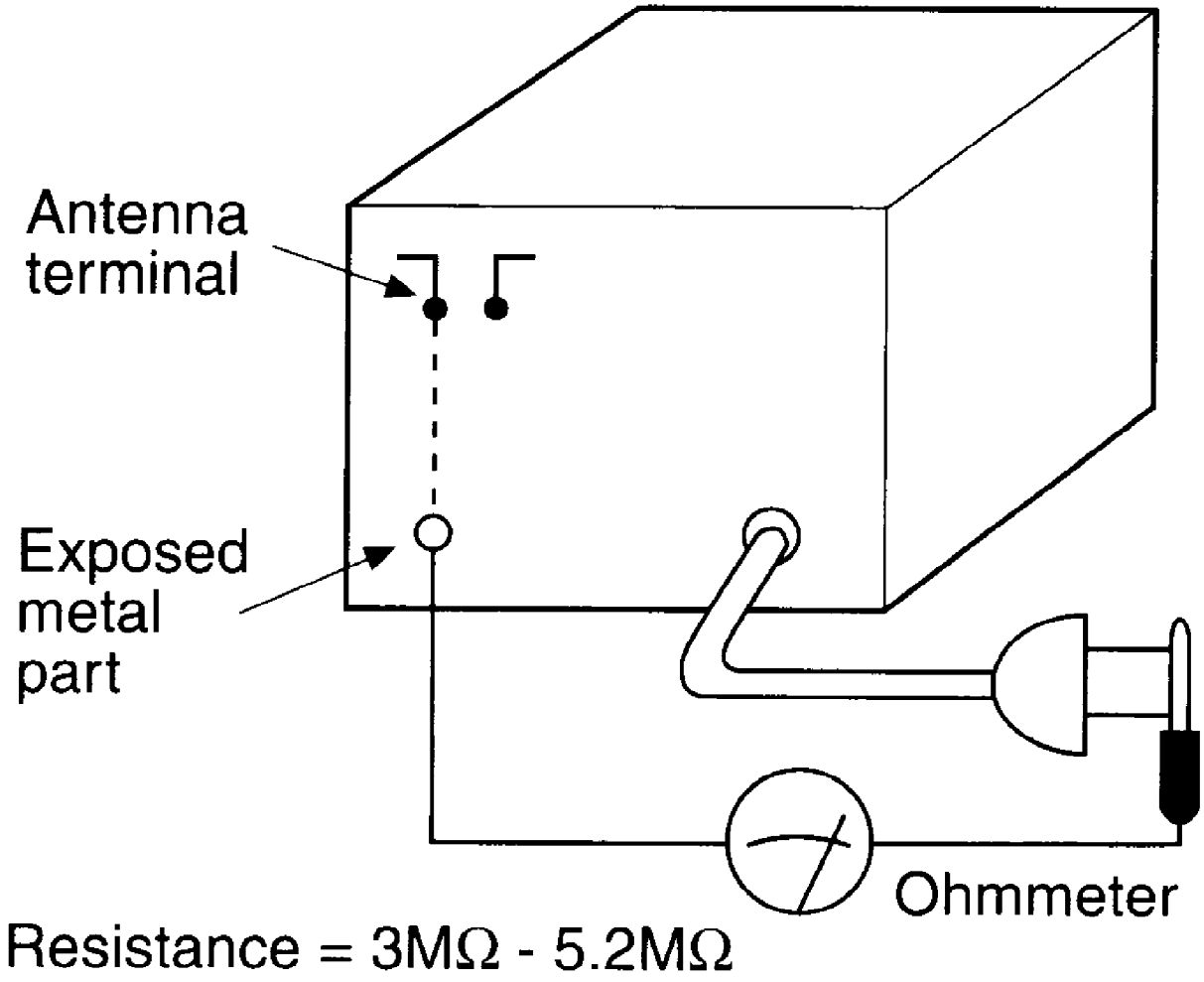
■ Insulation Resistance Test

1. Unplug the power cord and short the two prongs of the plug with a jumper wire.

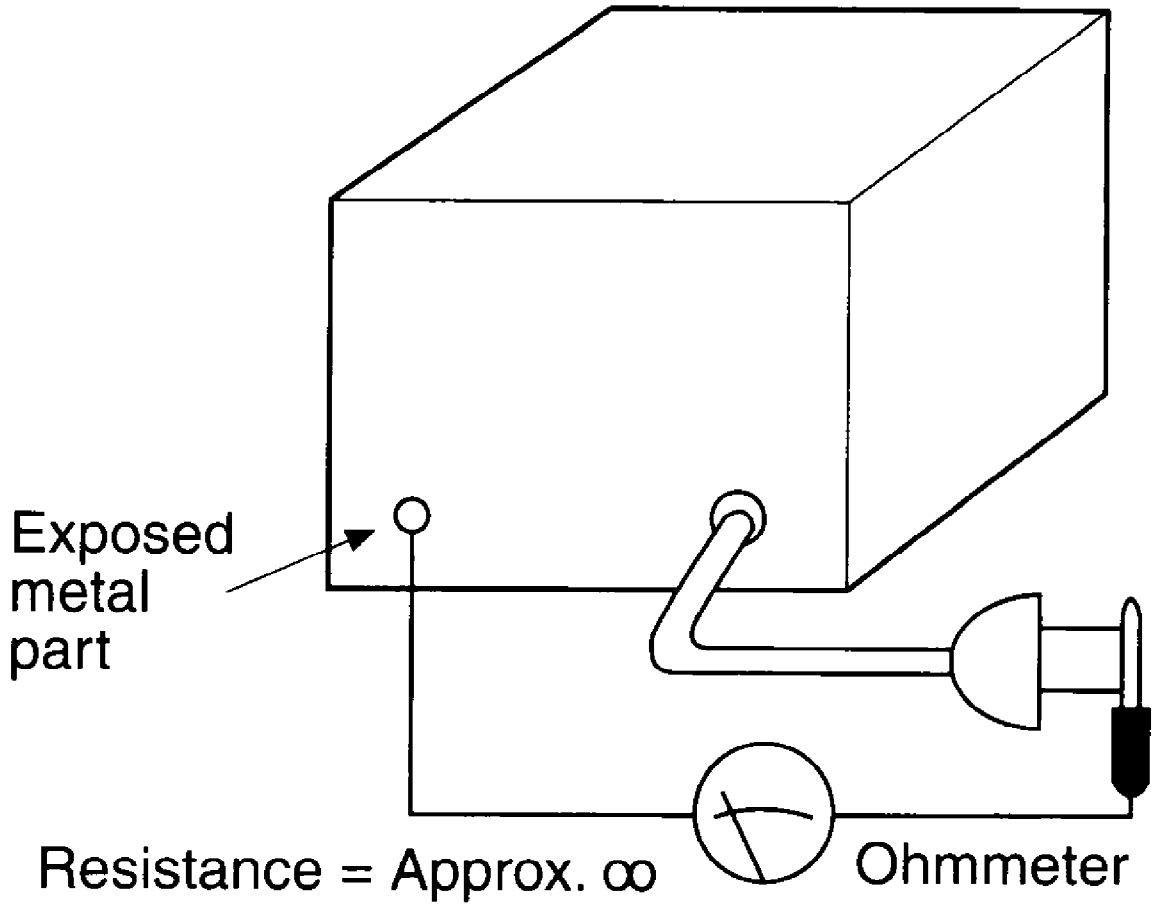
2. Turn on the power switch.

3. Measure the resistance value with ohmmeter between the jumper AC plug and each exposed metal cabinet part, such as screw heads, control shafts, handle brackets, etc. Equipment with antenna terminals should read between 3M Ω and 5.2M Ω to all exposed parts. (Fig. A) Equipment without antenna terminals should read approximately infinity to all exposed parts. (Fig. B)
***Note: Some exposed parts may be isolated from the chassis by design. These will read infinity.**

(Fig. A)


Antenna terminal
Exposed metal part
Ohmmeter
Resistance = 3MΩ - 5.2MΩ

(Fig. B)



4. If the measurement is outside the specified limits, there is a possibility of a shock hazard. The equipment should be repaired and rechecked before it is returned to the customer.

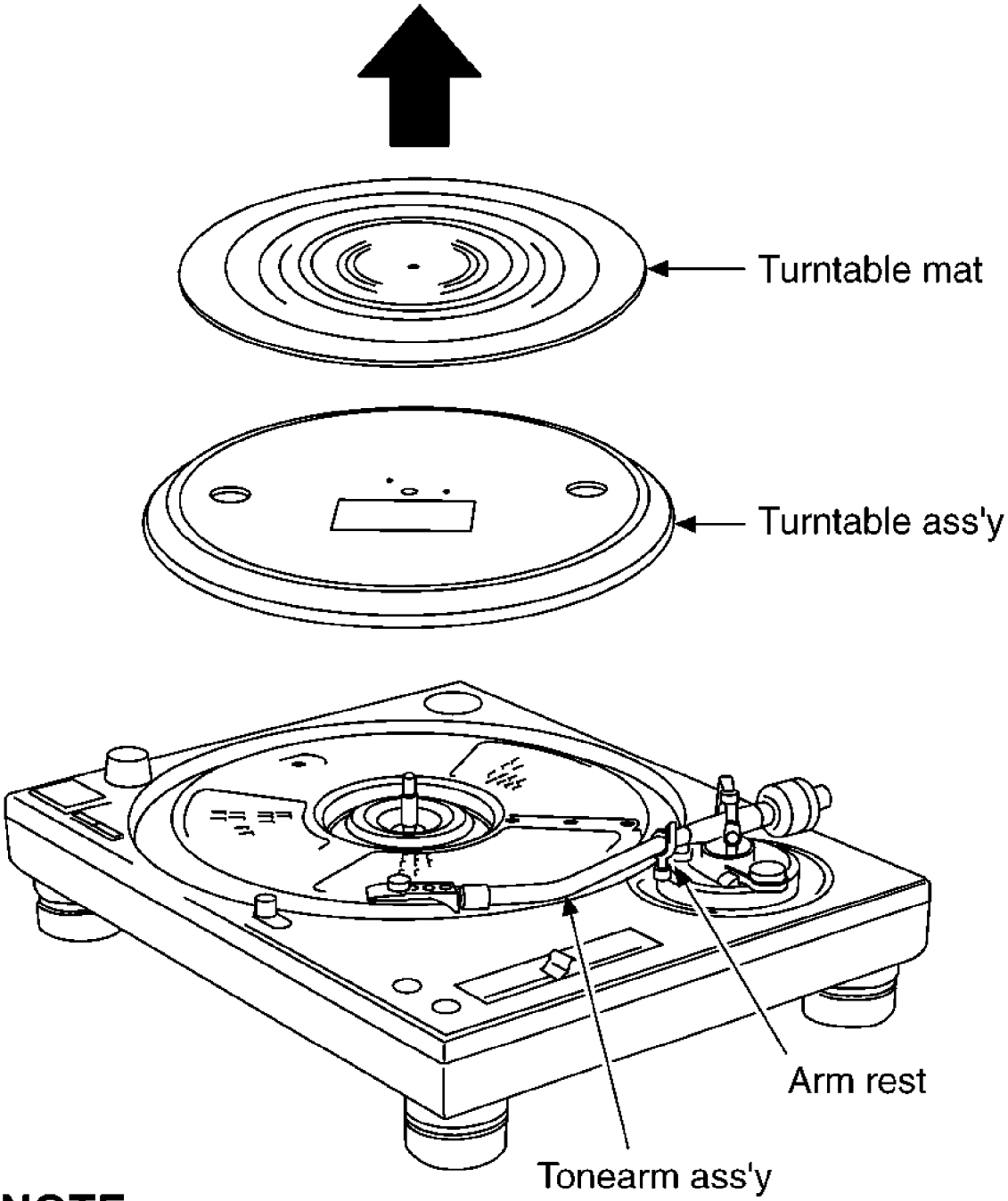
5. Caution for AC Mains Lead

6. Operation Checks and Component Replacement Procedures

- **This section describes procedures for checking the operation of the major printed circuit boards and replacing the main components.**
- **For reassembly after operation checks or replacement, reverse the respective procedures. Special reassembly procedures are described only when required.**

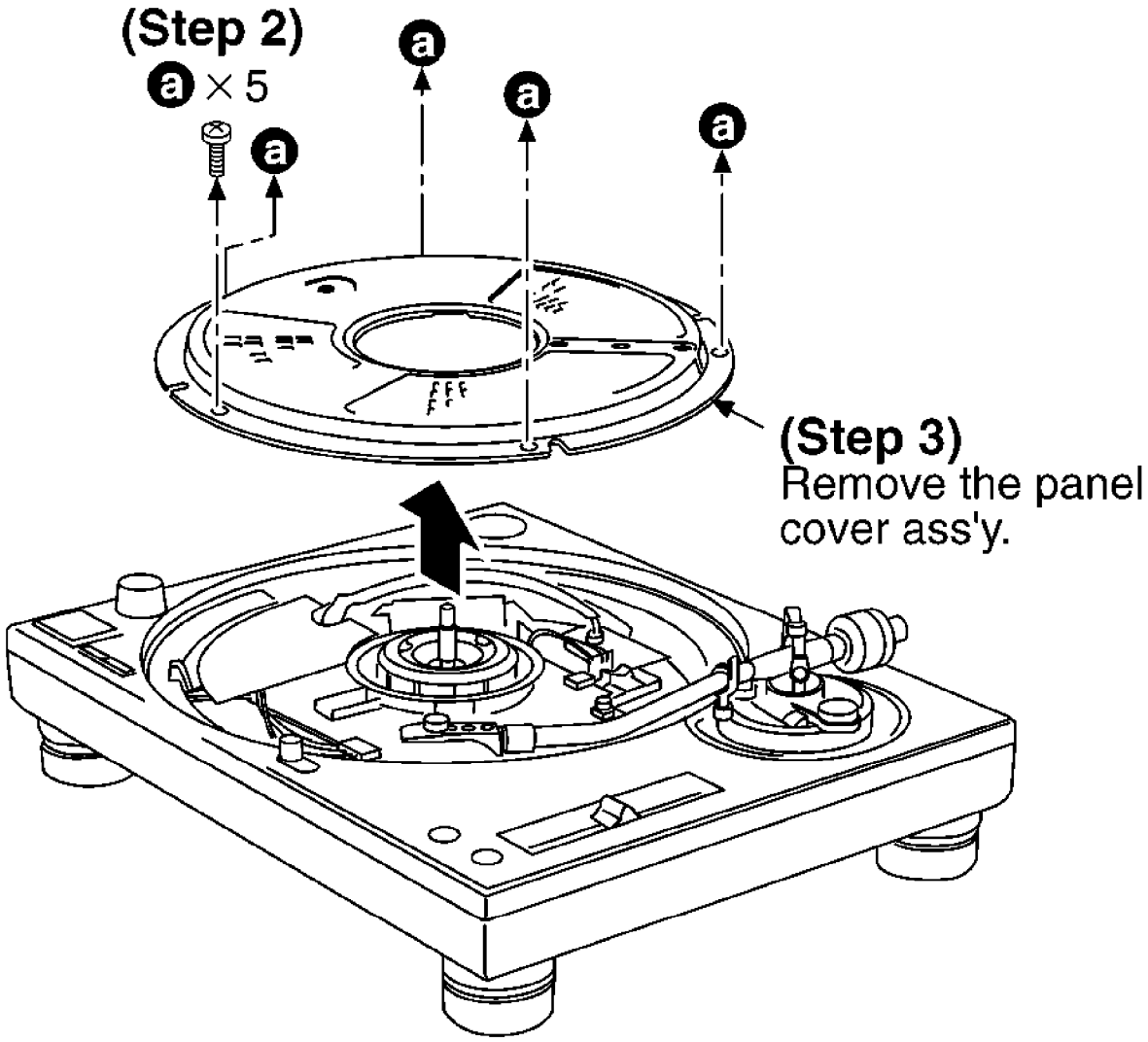
6.1. Checking for the main P.C.B. and power supply P.C.B.

(Step 1)
Remove the turntable mat and turntable ass'y.

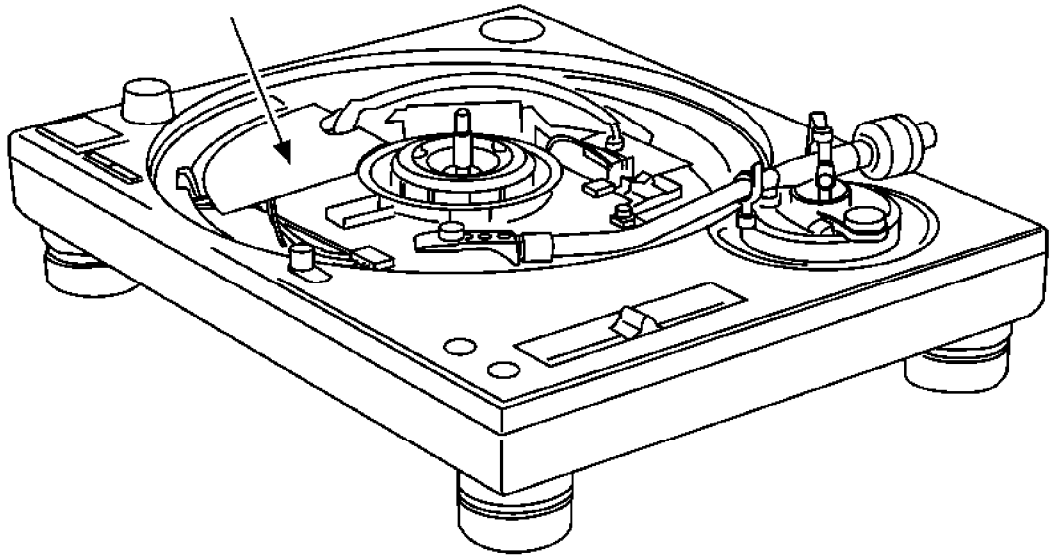


NOTE:
1. The tonearm ass'y should be supported by arm rest.
2. Take care not to stick the dust or iron powder to the

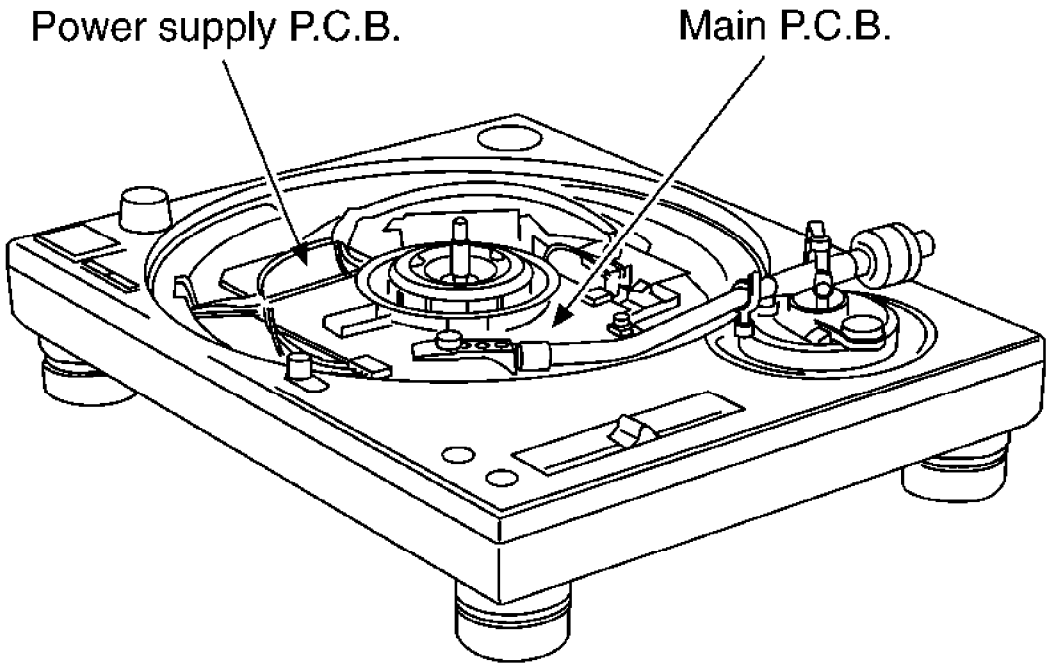
magnet attached to back inner side of turn table.



(Step 4)
Remove the barrier.

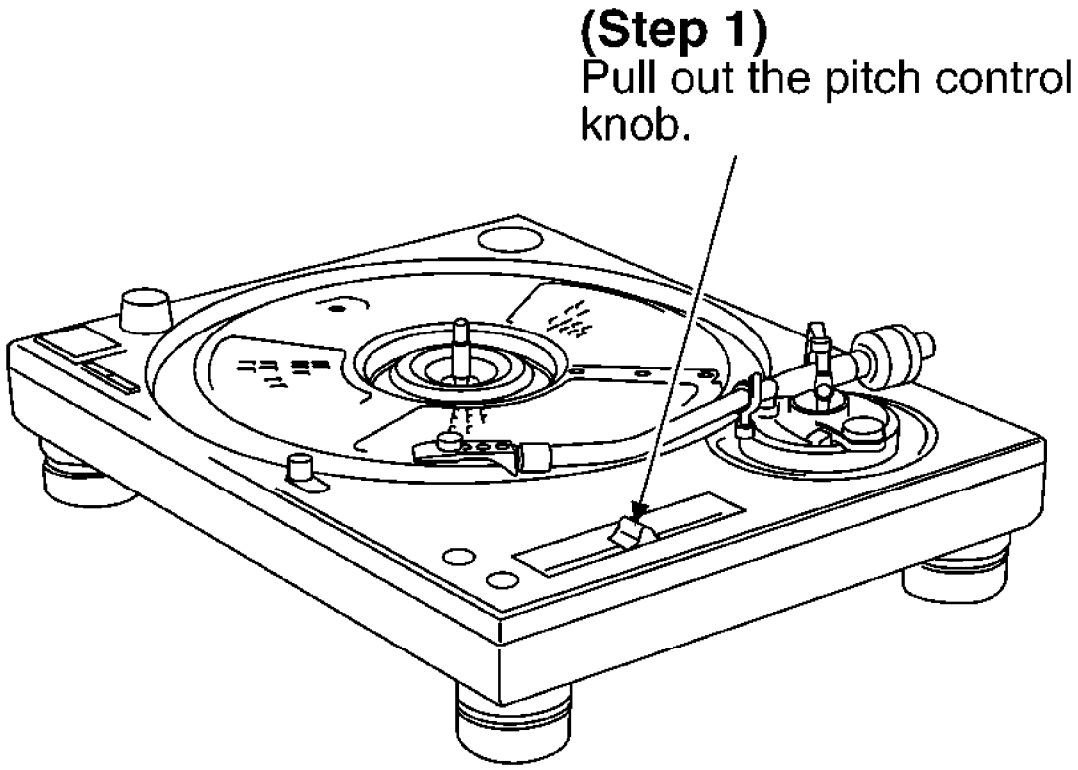


- **Check the main P.C.B. and power supply P.C.B. as shown below.**



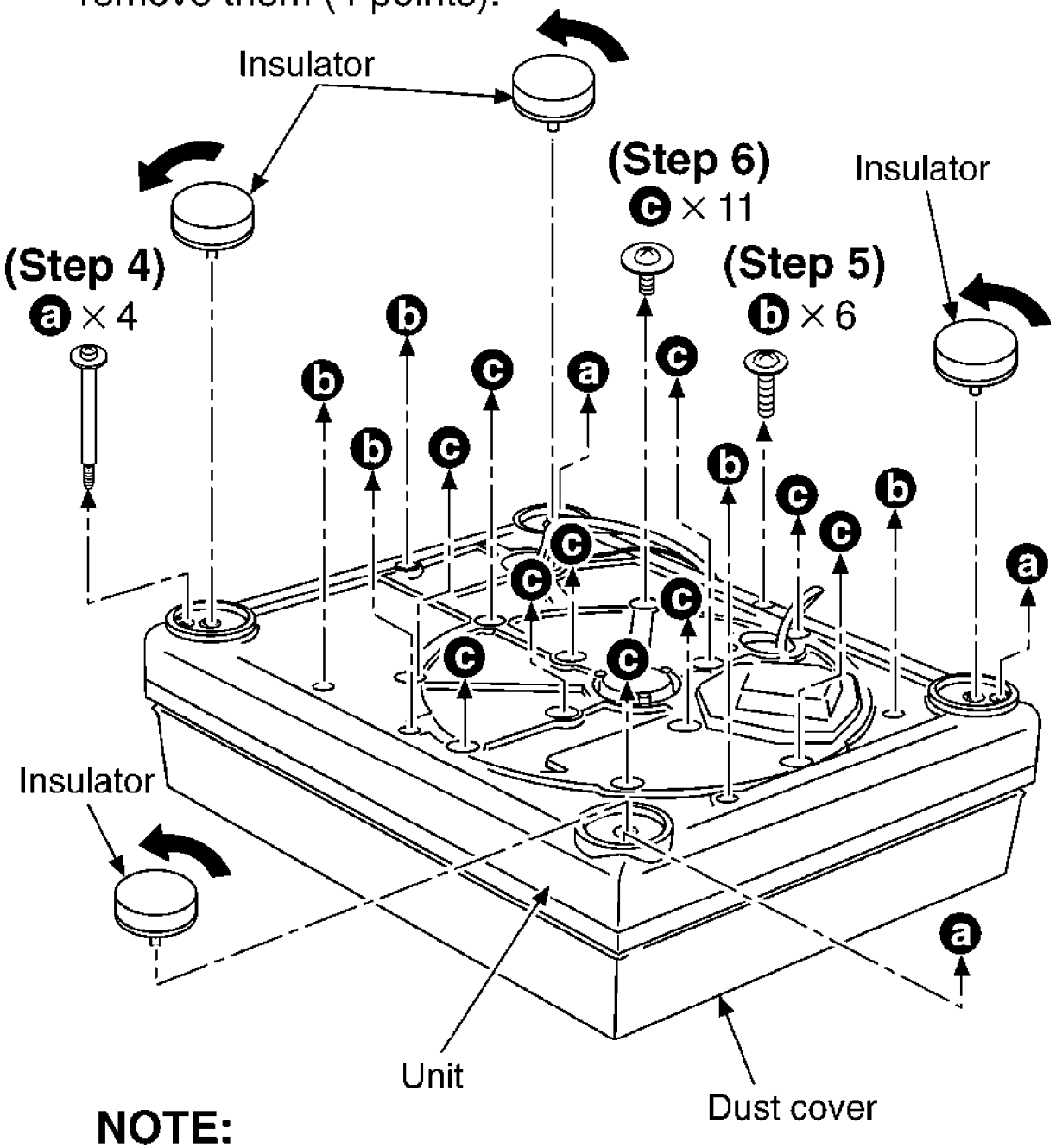
6.2. Checking for the pitch control (1) P.C.B.

- **Follow the (Step 1) of item 6.1.**



(Step 2)
Upset the unit, and then put the dust cover.

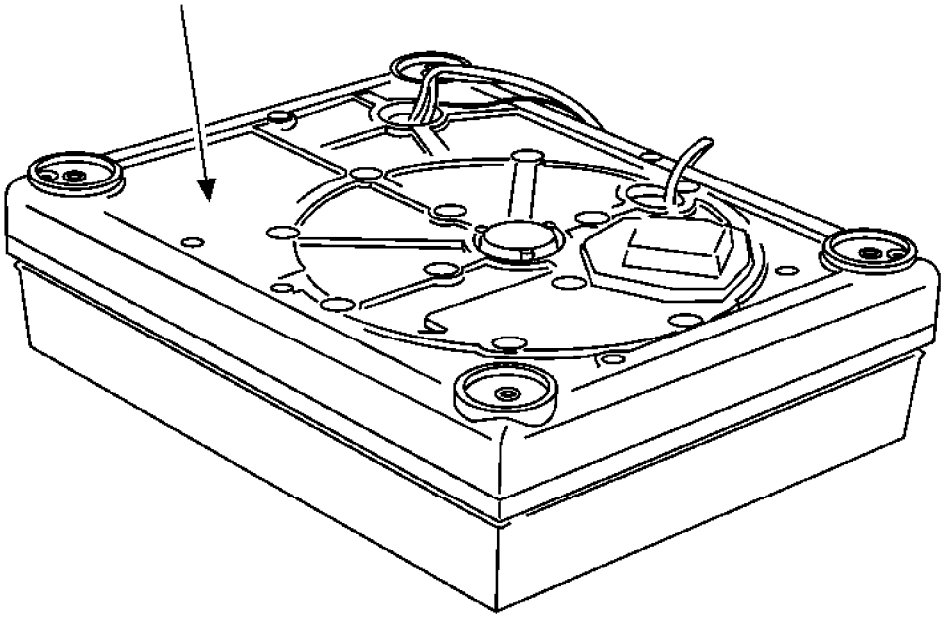
(Step 3)
Turn the insulators in the direction of arrow, and then remove them (4 points).

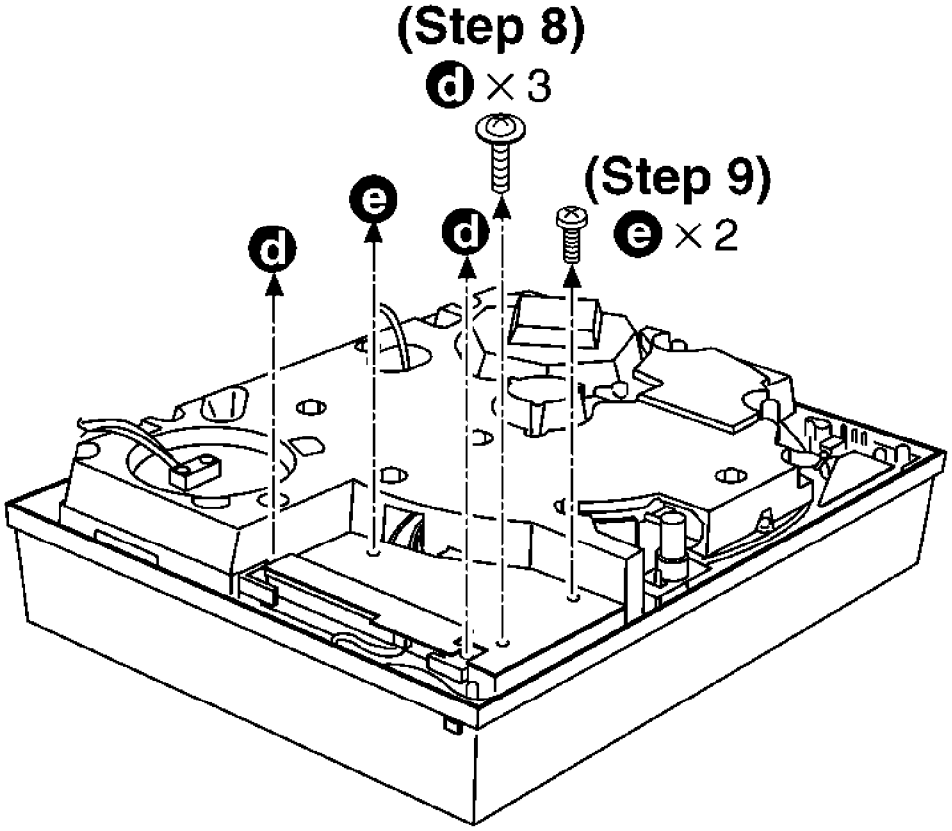


NOTE:
Use the soft cloth under the unit to prevent

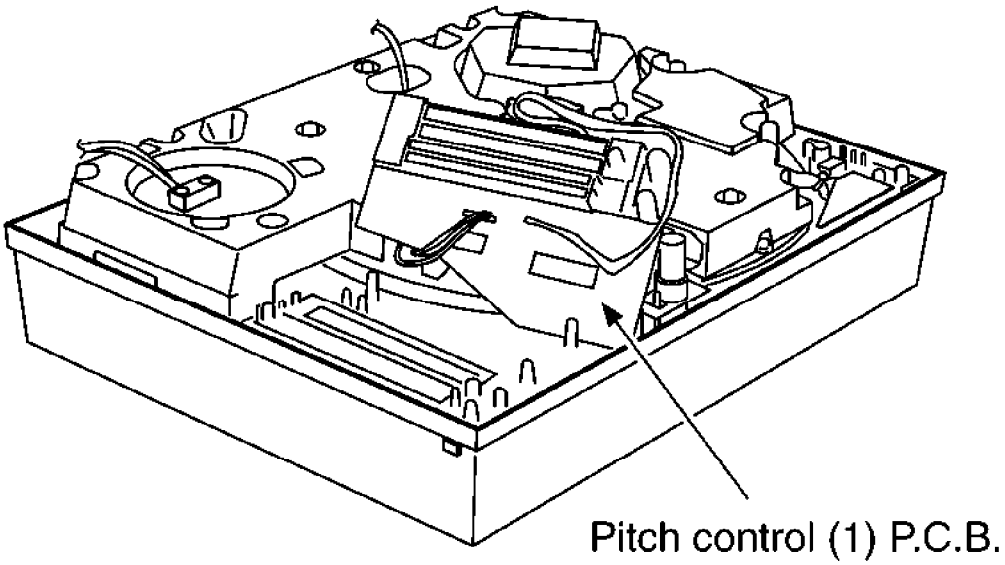
Use the soft cloth under the unit to prevent damage the dust cover when servicing.

(Step 7)
Remove the bottom cover (A) ass'y.



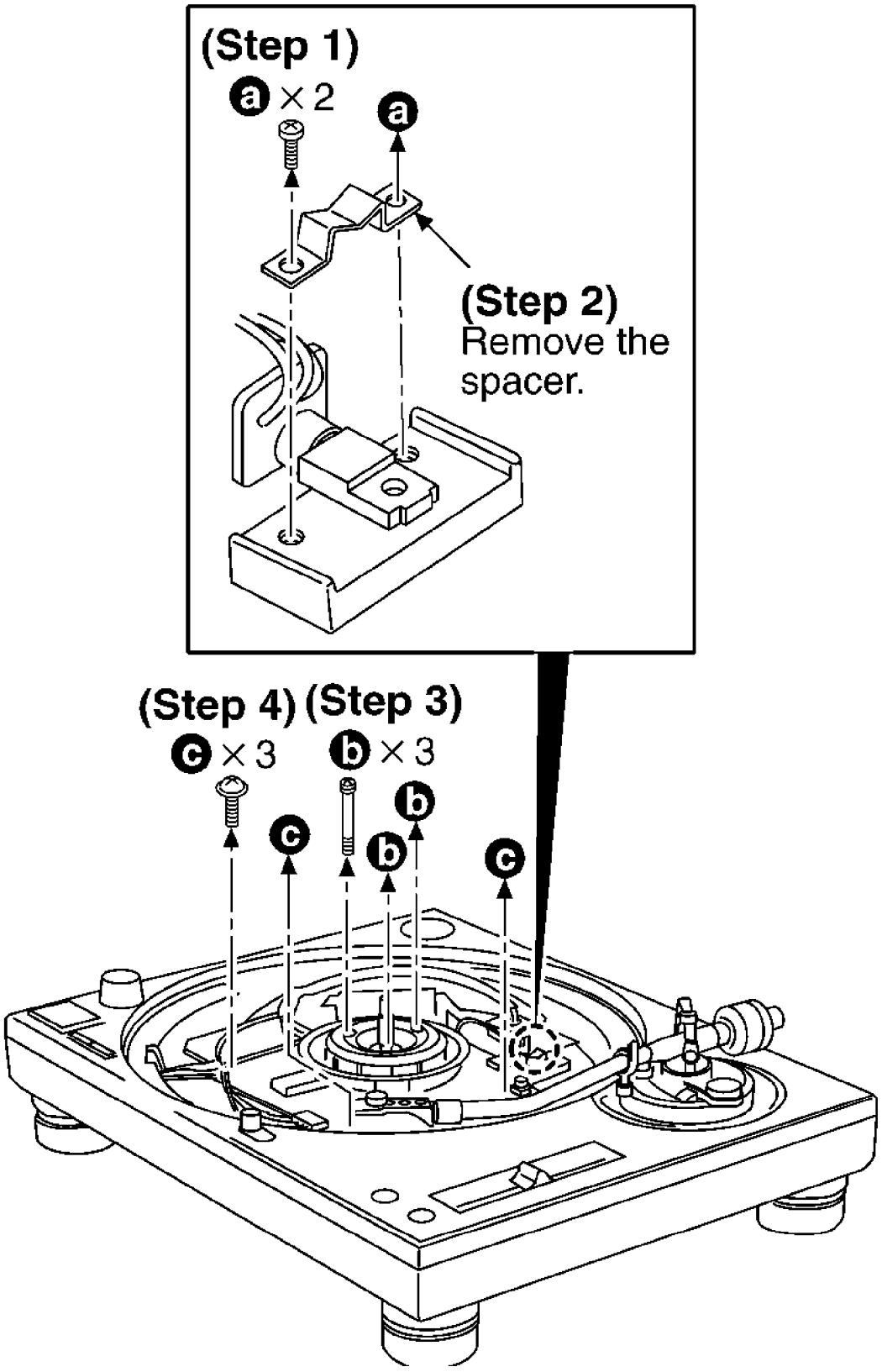


- **Check the pitch control (1) P.C.B. as shown below.**

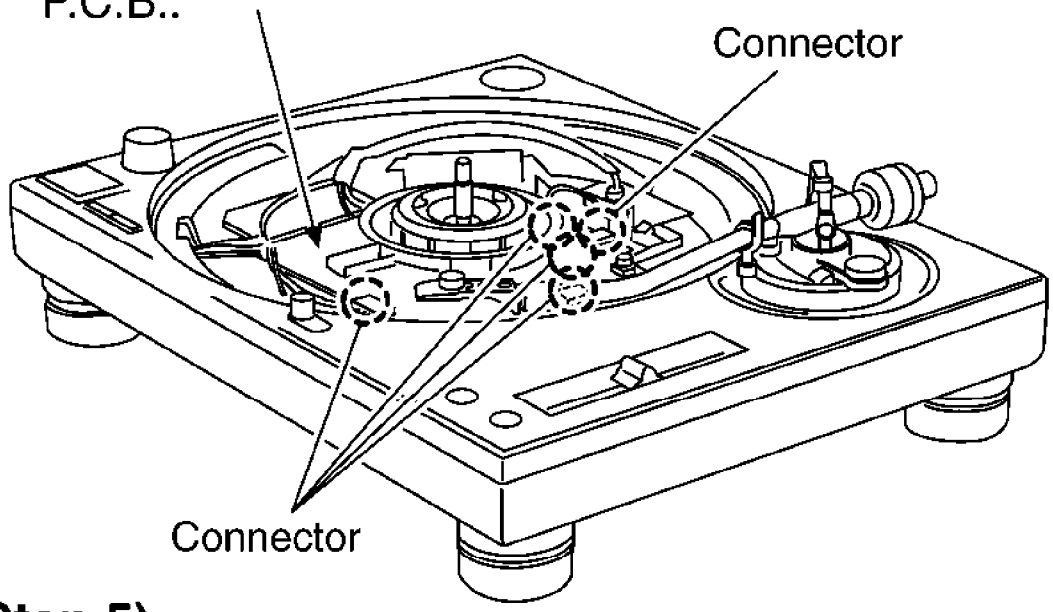


6.3. Replacement for the drive coil ass'y and FG coil ass'y

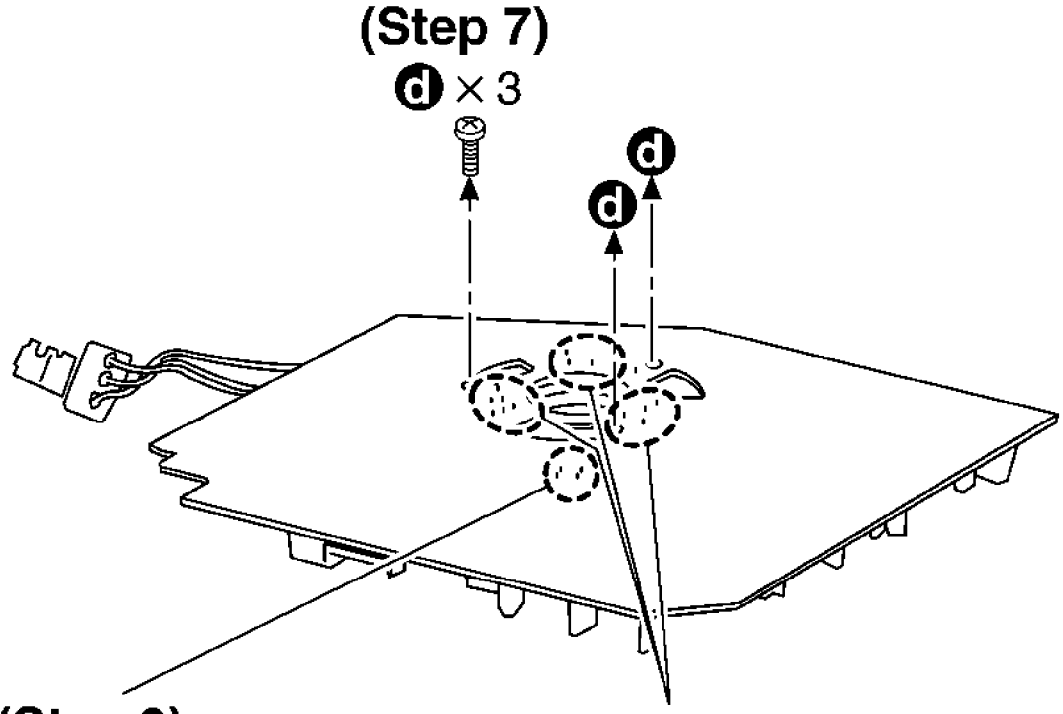
- **Follow the (Step 1) - (Step 4) of item 6.1.**


(Step 1)
a × 2
a
(Step 2)
Remove the
spacer.
(Step 4)
c × 3
(Step 3)
b × 3
b
c
b
c

(Step 6)
Remove the main P.C.B..

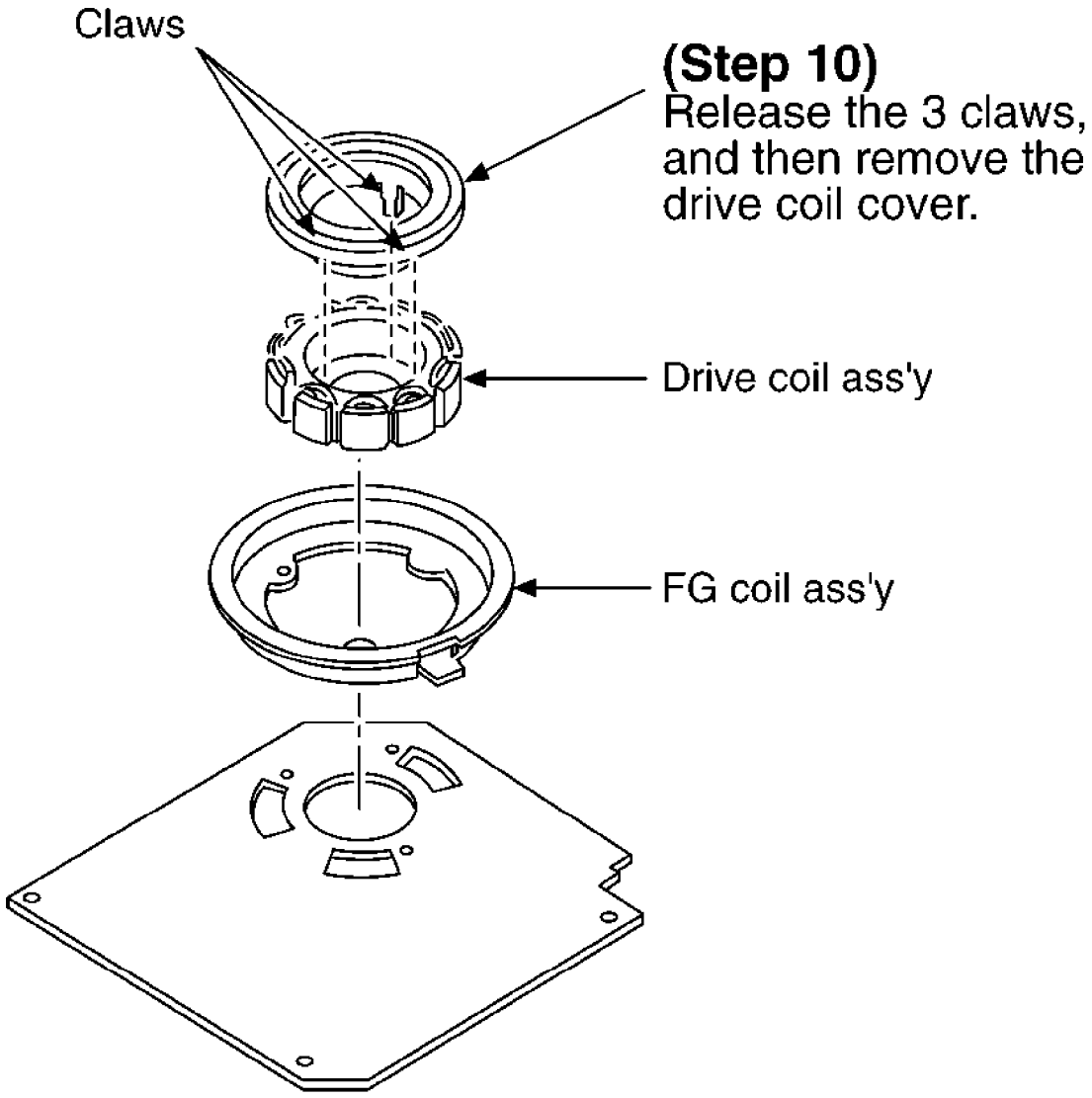


(Step 5)
Remove the 5 connectors.



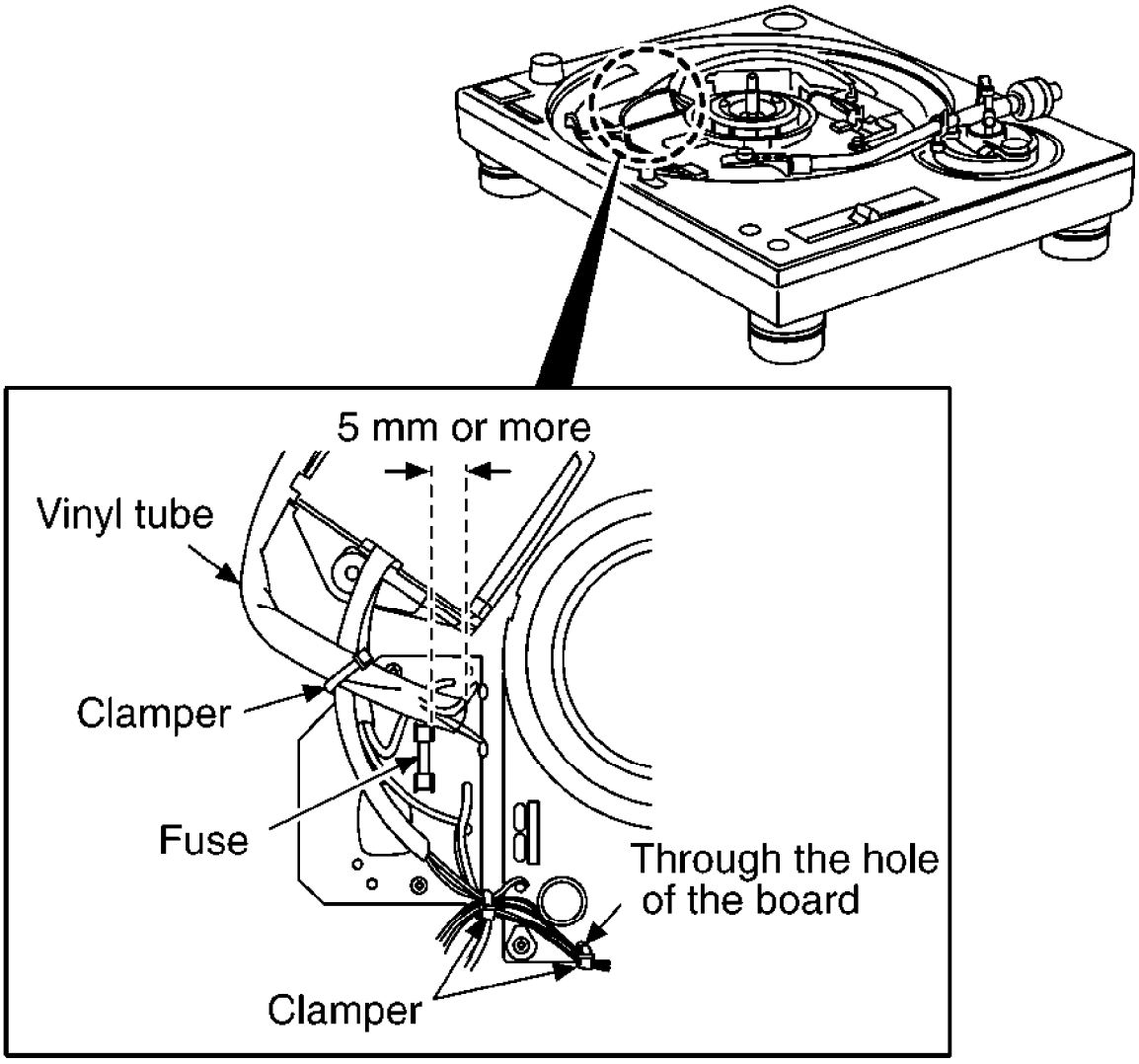
(Step 9)
Unsolder the terminals of FG coil ass'y (4 points).

(Step 8)
Unsolder the terminals of drive coil ass'y (18 points).


Claws
(Step 10)
Release the 3 claws, and then remove the drive coil cover.
Drive coil ass'y
FG coil ass'y

Wire arrenge for lead wires

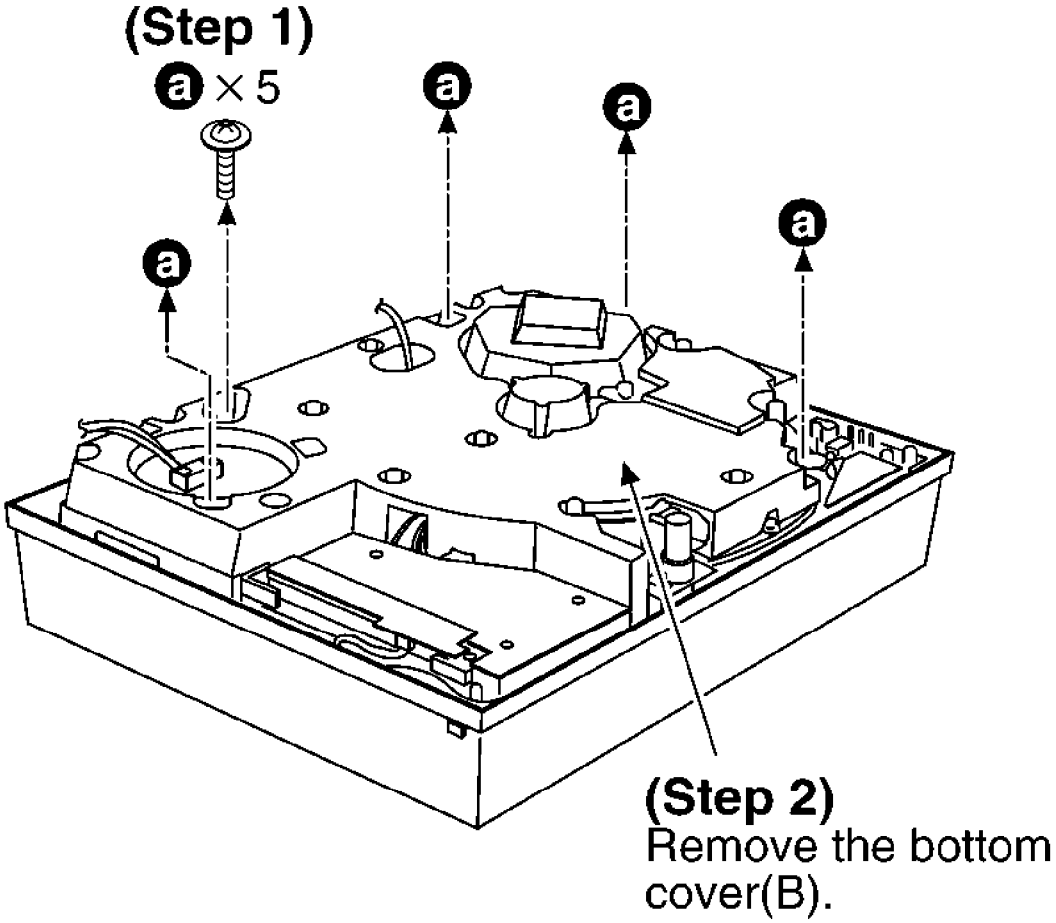
1. Leave 5 mm or more space between the tip of the vinyl tube and the fuse.
2. Fix each lead wire (three sections) with the clamper as shown a figure below.

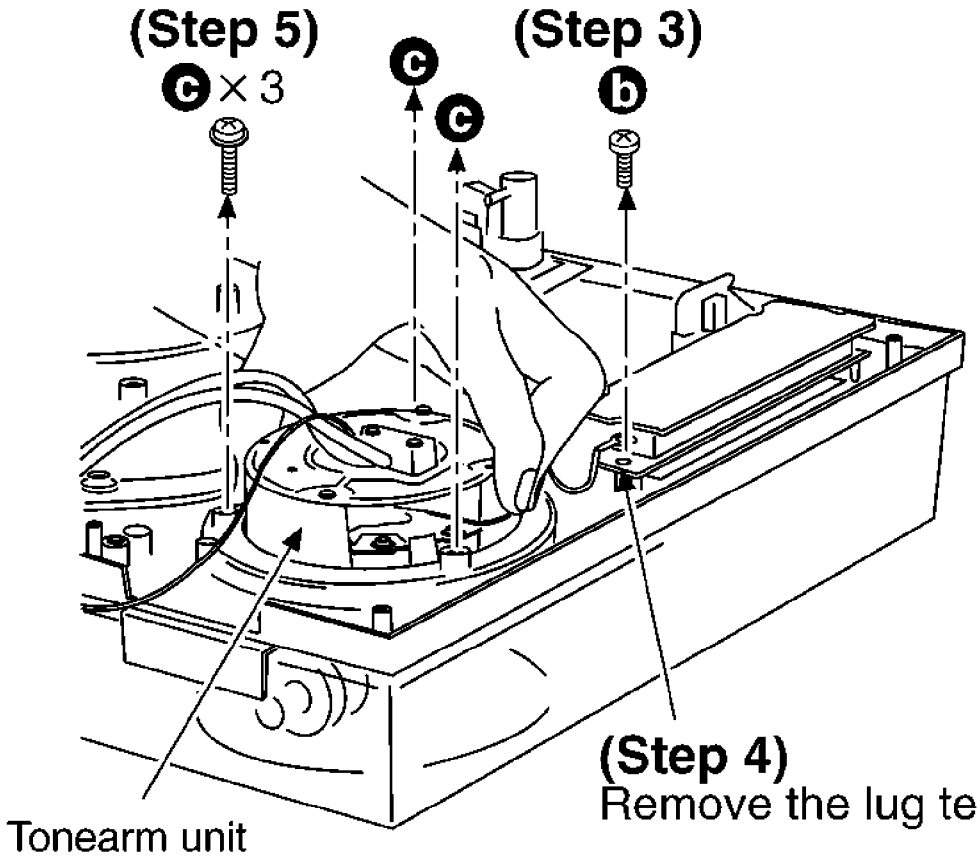


6.4. Replacement for the tonearm unit

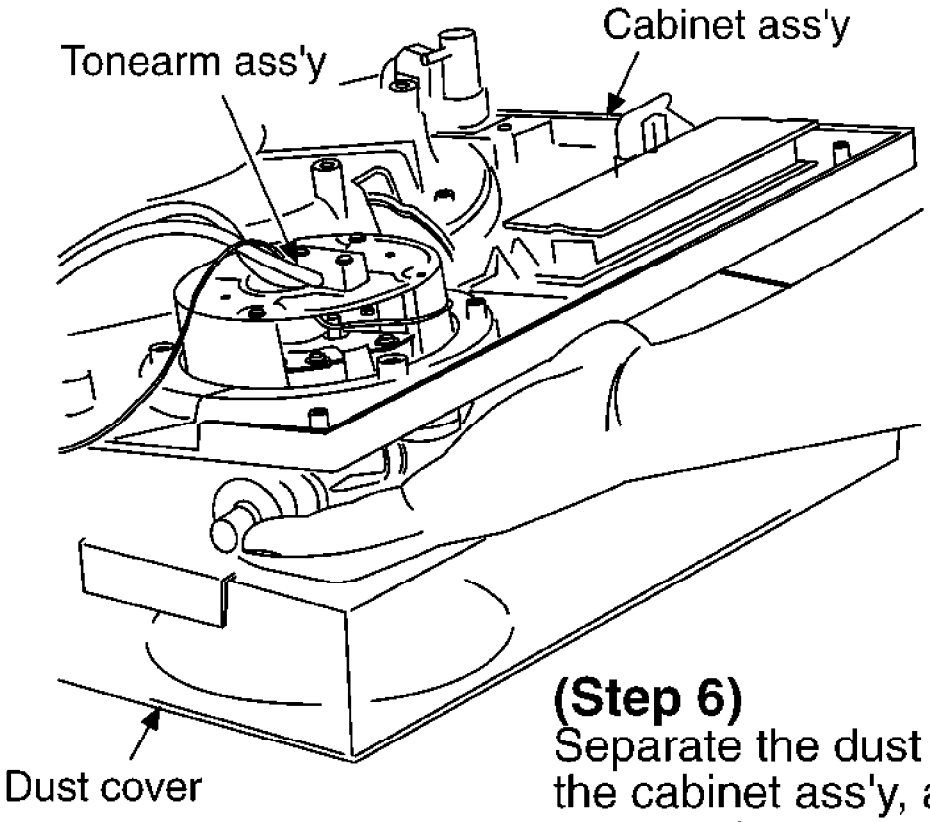
- **Follow the (Step 1) of item6.1.**

- **Follow the (Step 2) - (Step 7) of item 6.2.**

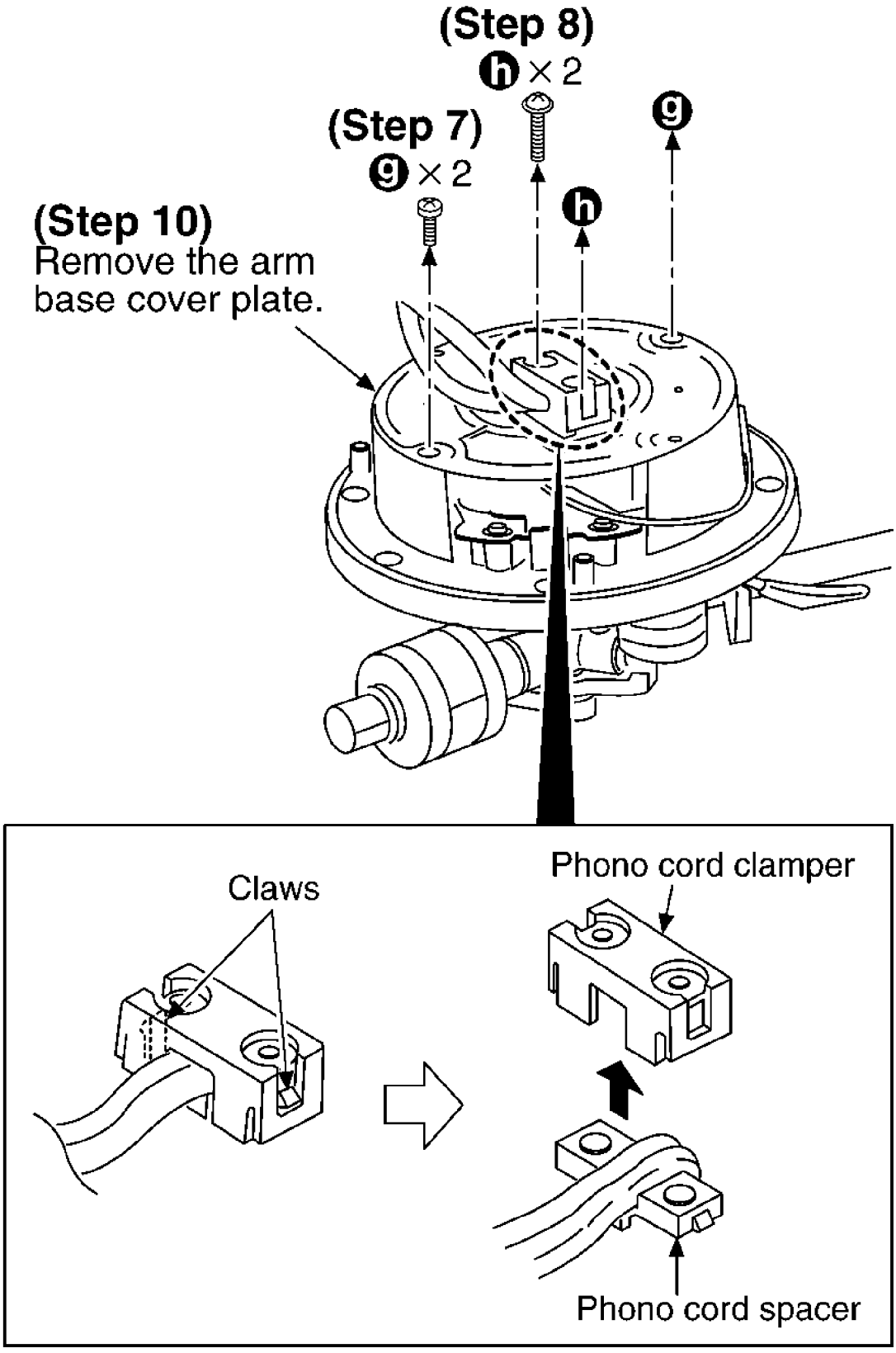




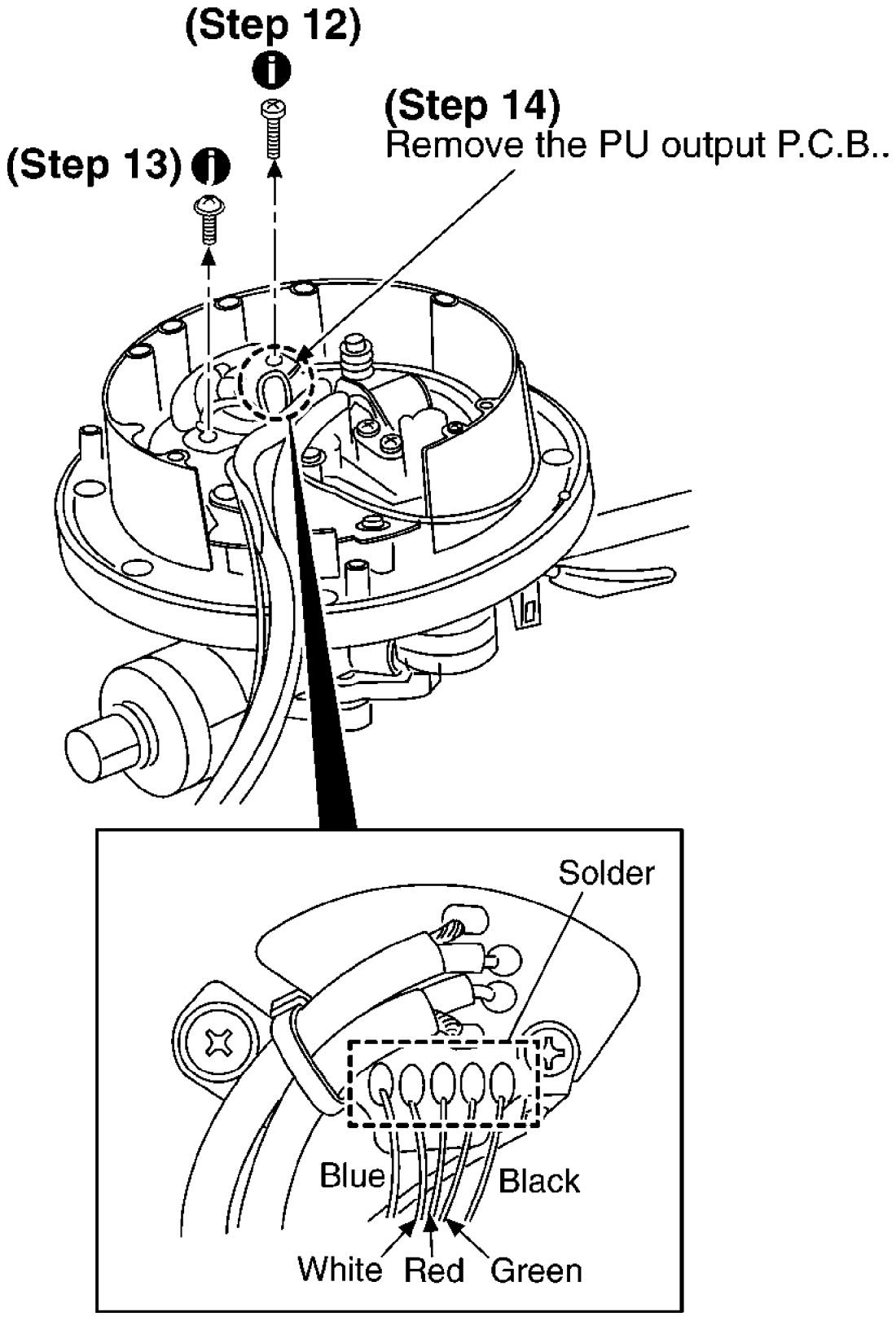
NOTE:
Hold the tonearm unit with hand when removing the 3 screws (ⓒ).



(Step 6)
Separate the dust cover and the cabinet ass'y, and then remove the tonearm ass'y.


(Step 8)
ⓗ × 2
(Step 7)
ⓖ × 2
ⓖ
ⓗ
(Step 10)
Remove the arm
base cover plate.
Claws
Phono cord clamper
Phono cord spacer

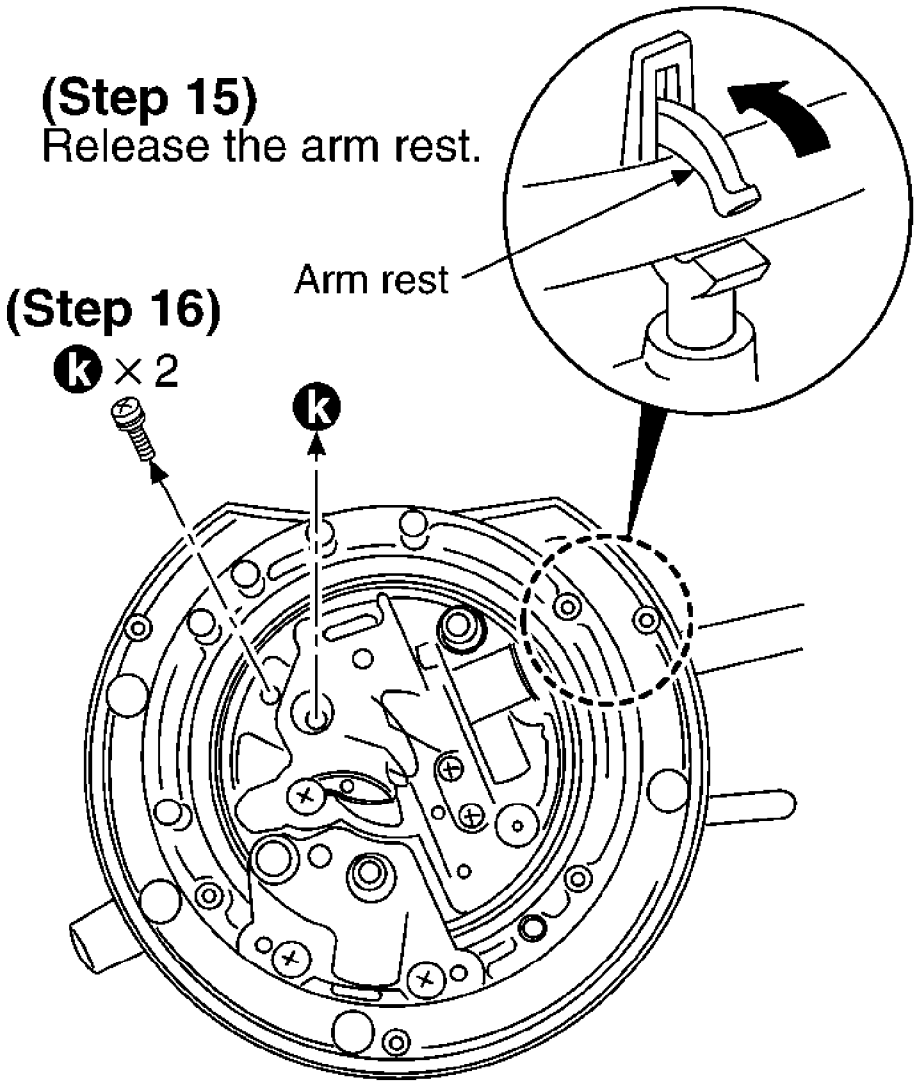
(Step 9)
Release the 2 claws, and then remove the phono cord clamper and phono cord spacer.

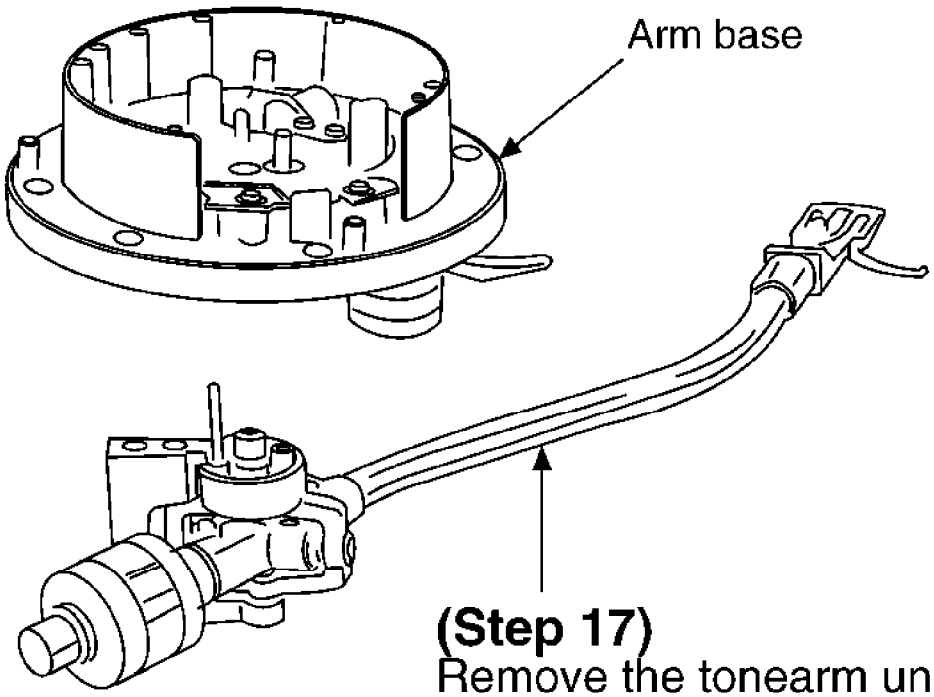

(Step 12)
(Step 13)
(Step 14)
Remove the PU output P.C.B..
Solder
Blue
Black
White
Red
Green

(Step 11)
Unsolder the terminals (5 points).

(Step 15)
Release the arm rest.

(Step 16)
k × 2



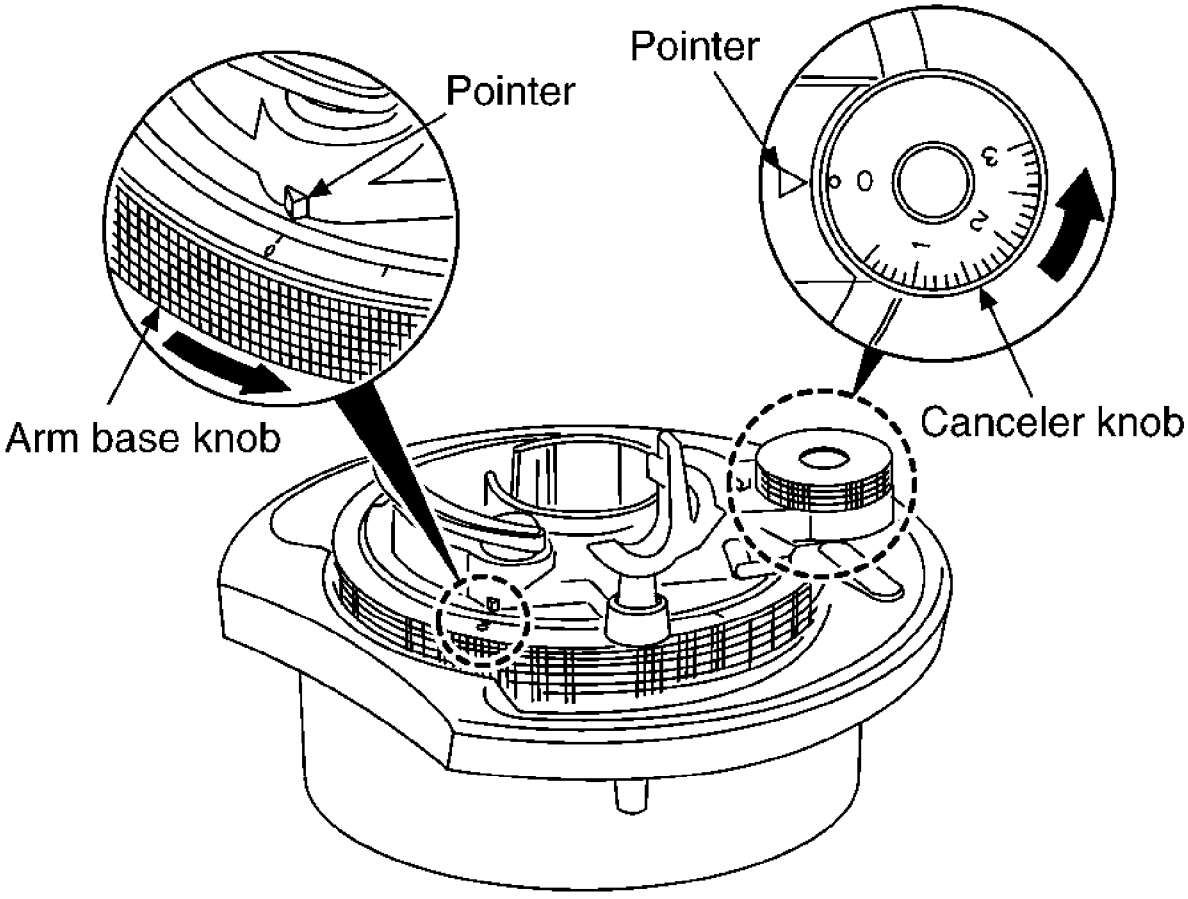


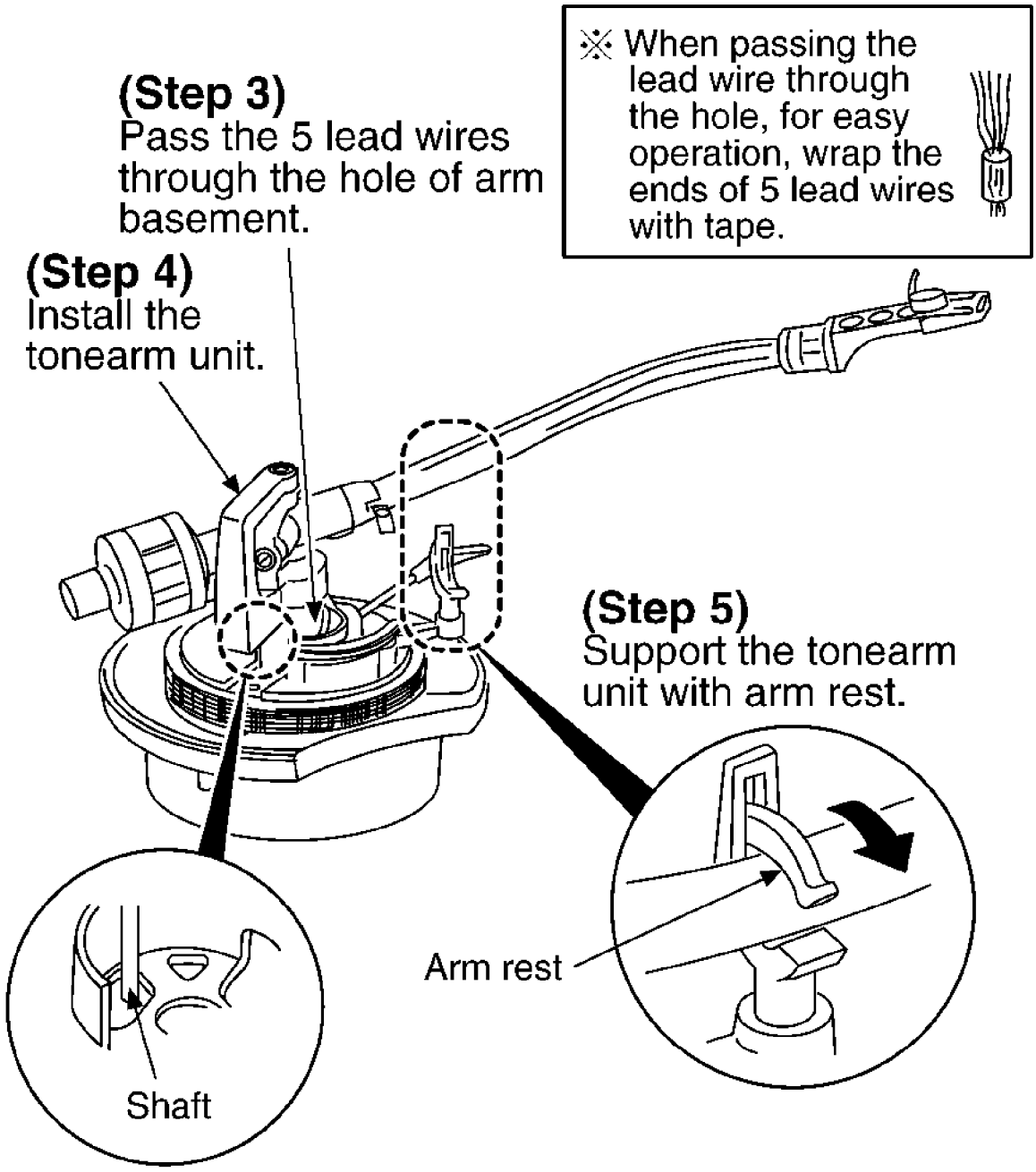
(Step 17)
Remove the tonearm unit.

Reassembly procedures for tonearm ass'y

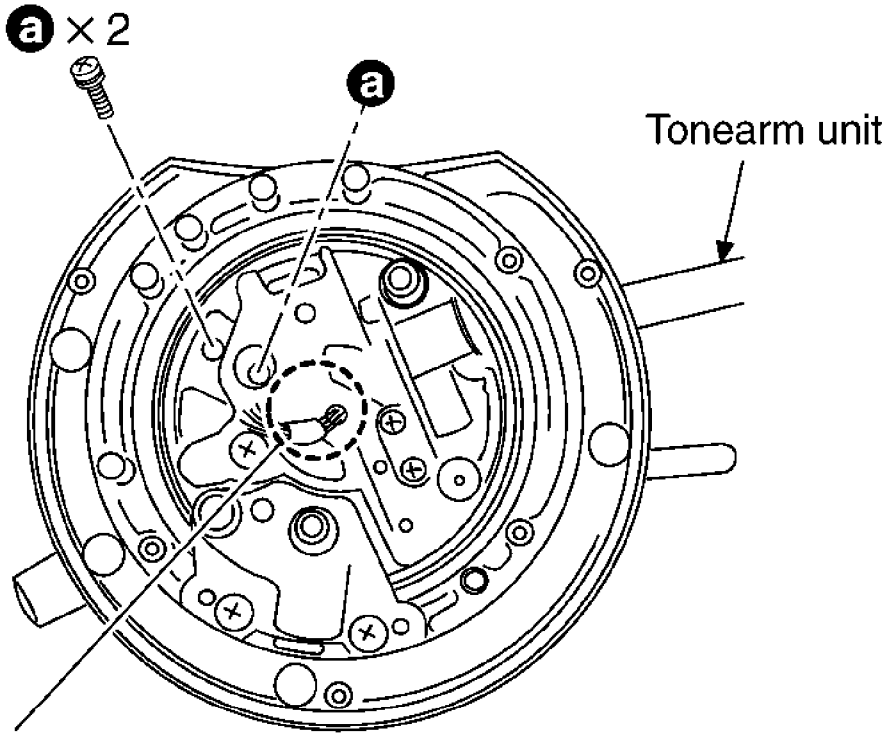
(Step 1)
Rotate the arm base knob in the direction of arrow, and then align the pointer with the scale "0".

(Step 2)
Rotate the canceler knob in the direction of arrow, and then align the pointer with the scale "0".




※ When passing the lead wire through the hole, for easy operation, wrap the ends of 5 lead wires with tape.
(Step 3)
Pass the 5 lead wires through the hole of arm basement.
(Step 4)
Install the tonearm unit.
(Step 5)
Support the tonearm unit with arm rest.
Arm rest
Shaft

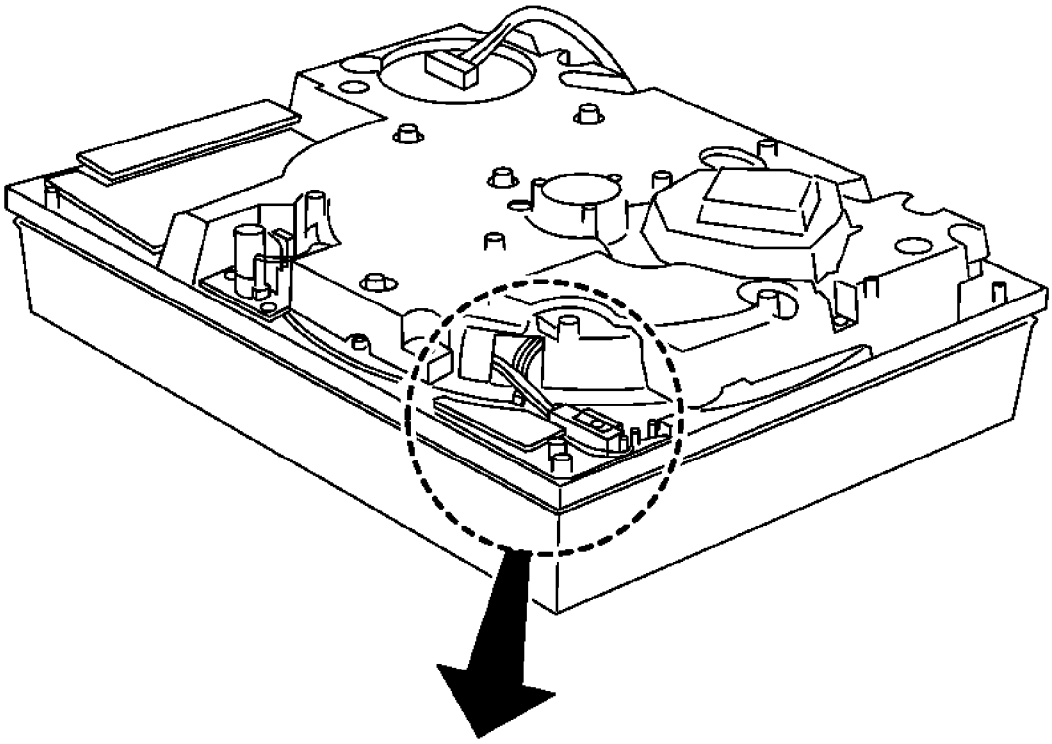
(Step 6)
Tighten the tonearm unit screws.

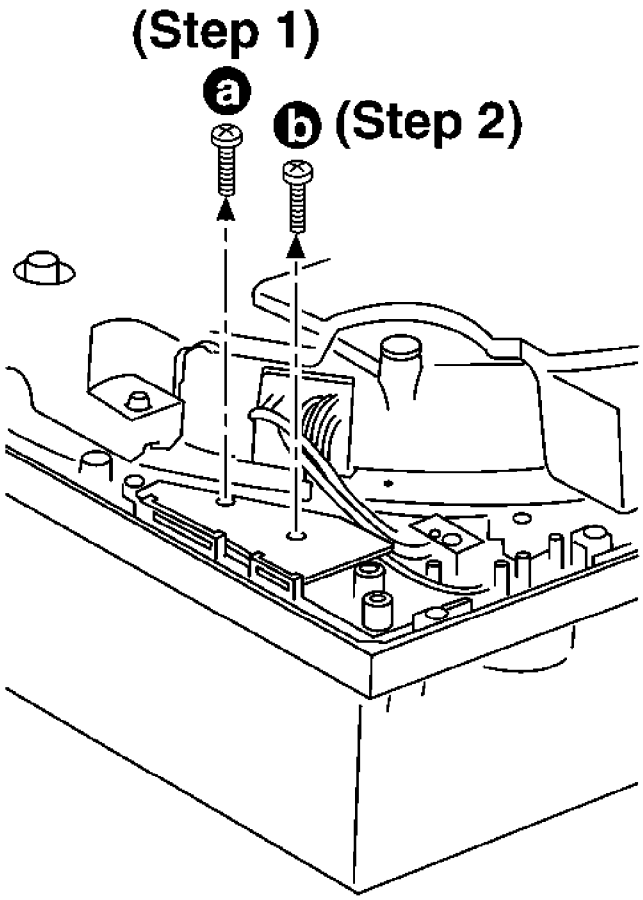


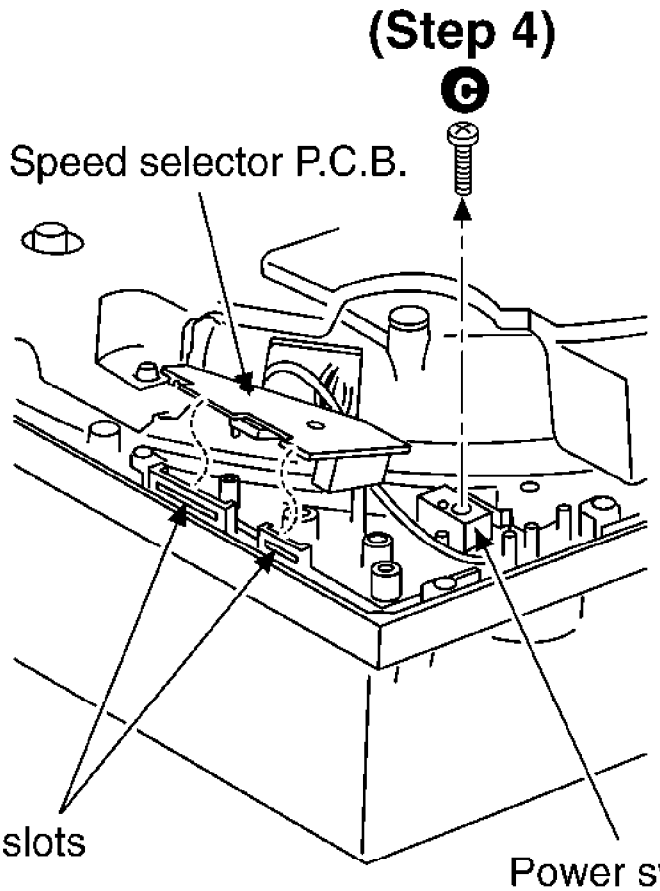
(Step 7)
Remove the tape of lead wire.

6.5. Replacement for the parts mounted onspeed selector P.C.B. and power switch

- **Follow the (Step 1) of item 6.1.**
- **Follow the (Step 2) - (Step 7) of item 6.2.**




(Step 1)
a
b (Step 2)



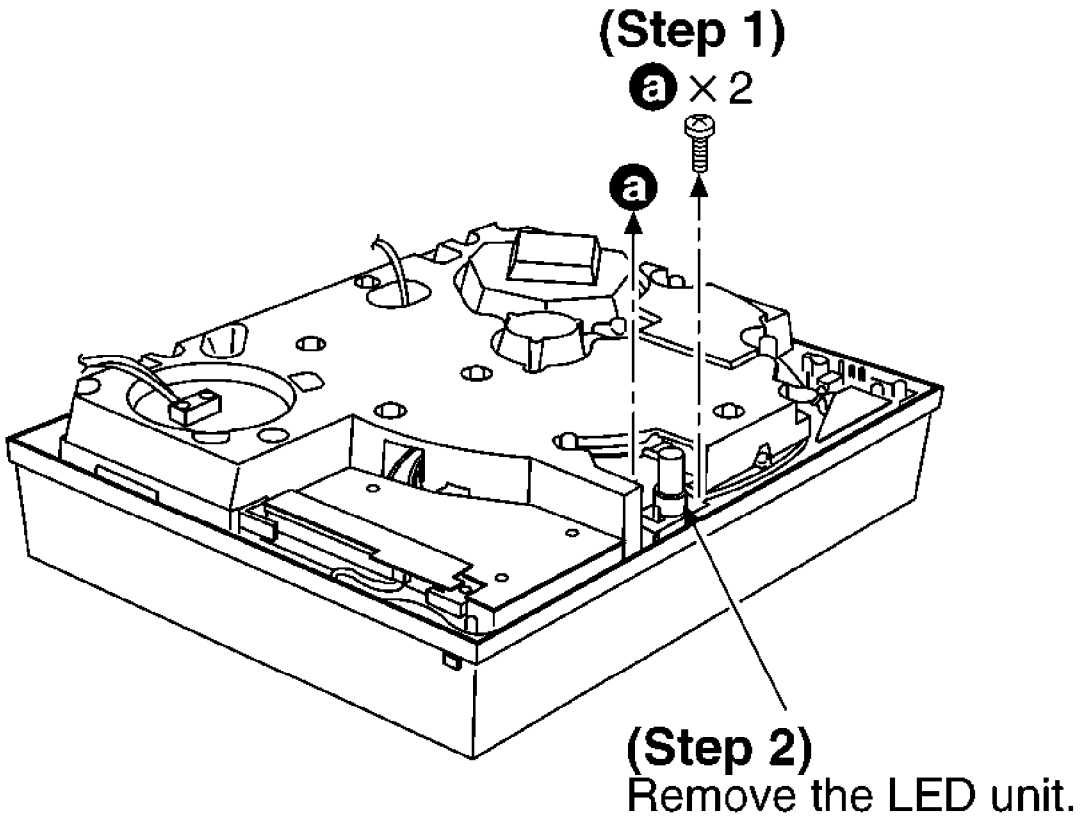
(Step 3)
Remove the speed selector P.C.B..

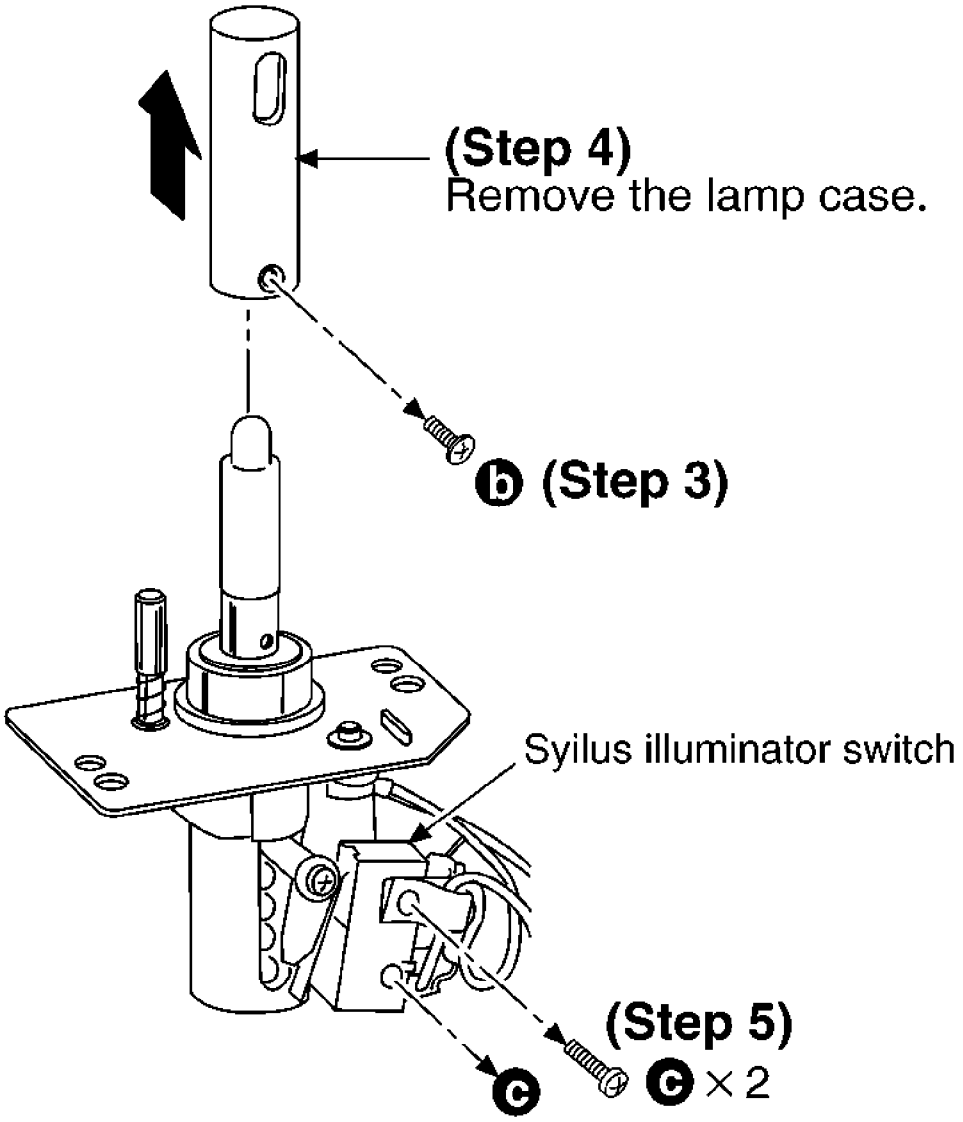
6.6. Replacement for the LED and stylus illuminator switch

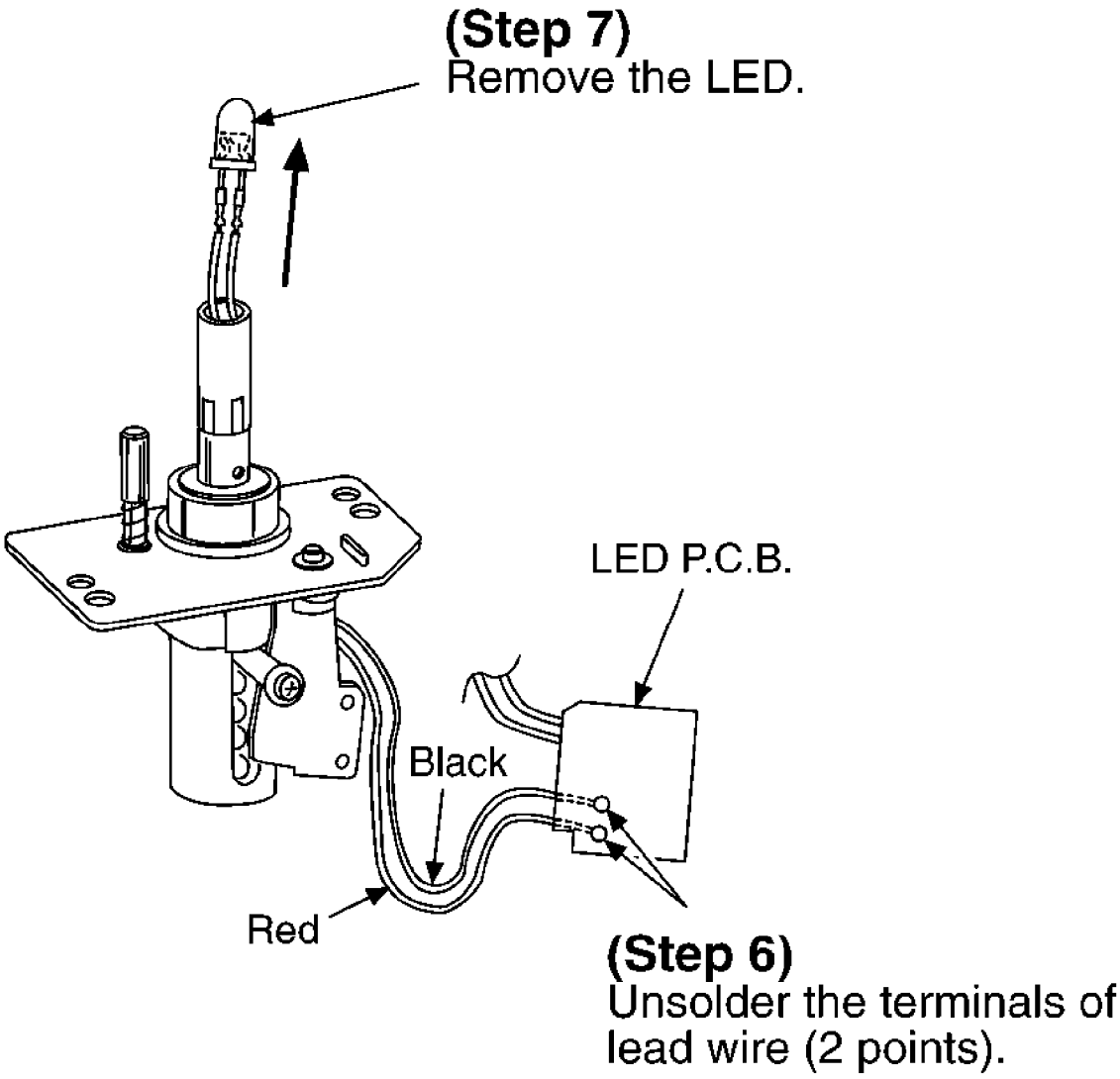
- **Follow the (Step 1) of item 6.1.**
- **Follow the (Step 2) - (Step 7) of item 6.2.**

Cautions

1. For lightening the needle tip, this unit uses a blue LED instead of a conventional lamp. The blue LED is very much sensitive to static electricity; therefore, be especially careful of handling it.
2. This LED may be destroyed or worsened by the static electricity charged in clothes and human bodies. When handling and repairing the LED, be especially careful of such destruction. Be sure to take necessary measures such as wearing a wrist strap.




(Step 4)
Remove the lamp case.
ⓑ (Step 3)
Syilus illuminator switch
(Step 5)
ⓒ × 2



7. Cautions in handling of the blue LED

- **For lightening the needle tip, this unit uses a blue LED instead of a conventional lamp. The blue LED is very much sensitive to static electricity; therefore, be especially careful of handling it.**

■ ⚠ **Be careful of destruction by the static electricity**

- **This LED may be destroyed or worsened by the static electricity charged in clothes and human bodies. When handling and repairing the LED, be especially careful of such destruction. Be sure to take necessary measures such as wearing**

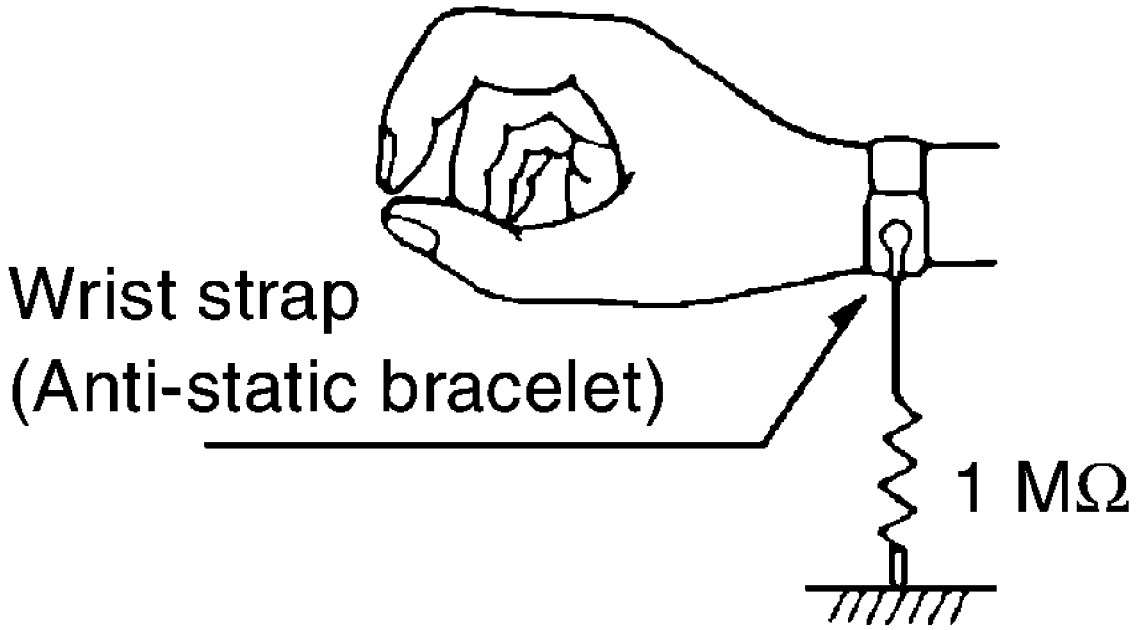
a wrist strap.

- **Grounding for electrostatic breakdown prevention**

1. Human body grounding

- Use the anti-static wrist strap to discharge the static electricity from your body.(Fig. 12-1)

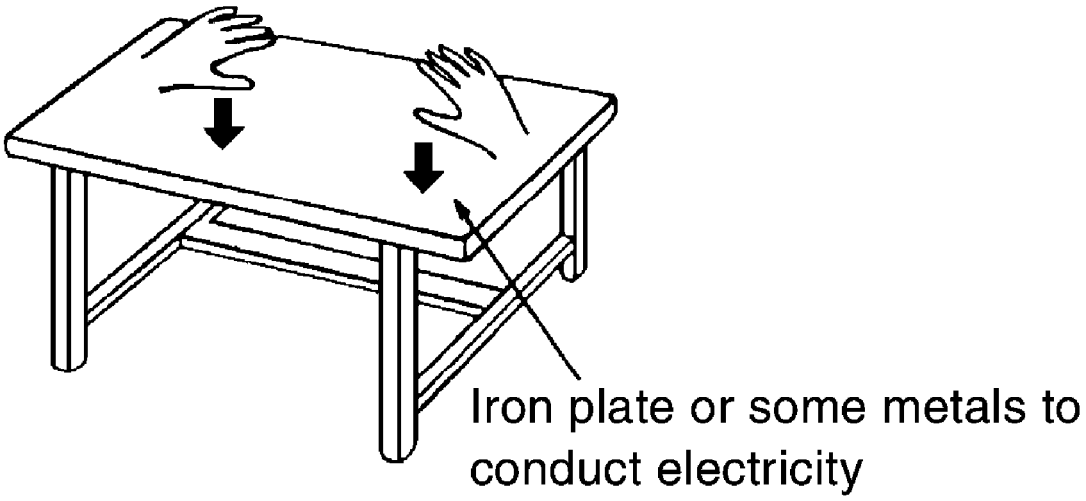
(Fig. 12-1)



2. Work table grounding

- Put a conductive material (sheet) or steel sheet on the area where the traverse deck (optical pick-up) is placed, and ground the sheet.(Fig. 12-2)

(Fig. 12-2)



Caution:

The static electricity of your clothes will not be grounded through the wrist strap. So take care not to let your clothes touch the traverse deck (optical pick-up).

8. Type Illustration of IC's, Transistors and Diods

9. Measurements and Adjustments

9.1. The state of set and the use apparatus

- **Make the following adjustments after replacing parts as IC's, Transistors, Diodes, etc.**
- **Condition of the set.**

1. Power switch: ON
2. Pitch control: Center position
3. Speed selector switch: 33-1/3 r/min

- **Instruments to be used**

- **Tester**
- **Frequency counter**

9.2. Measurements and Adjustments

9.2.1. Pitch control ±0% adjustment (PITCH)

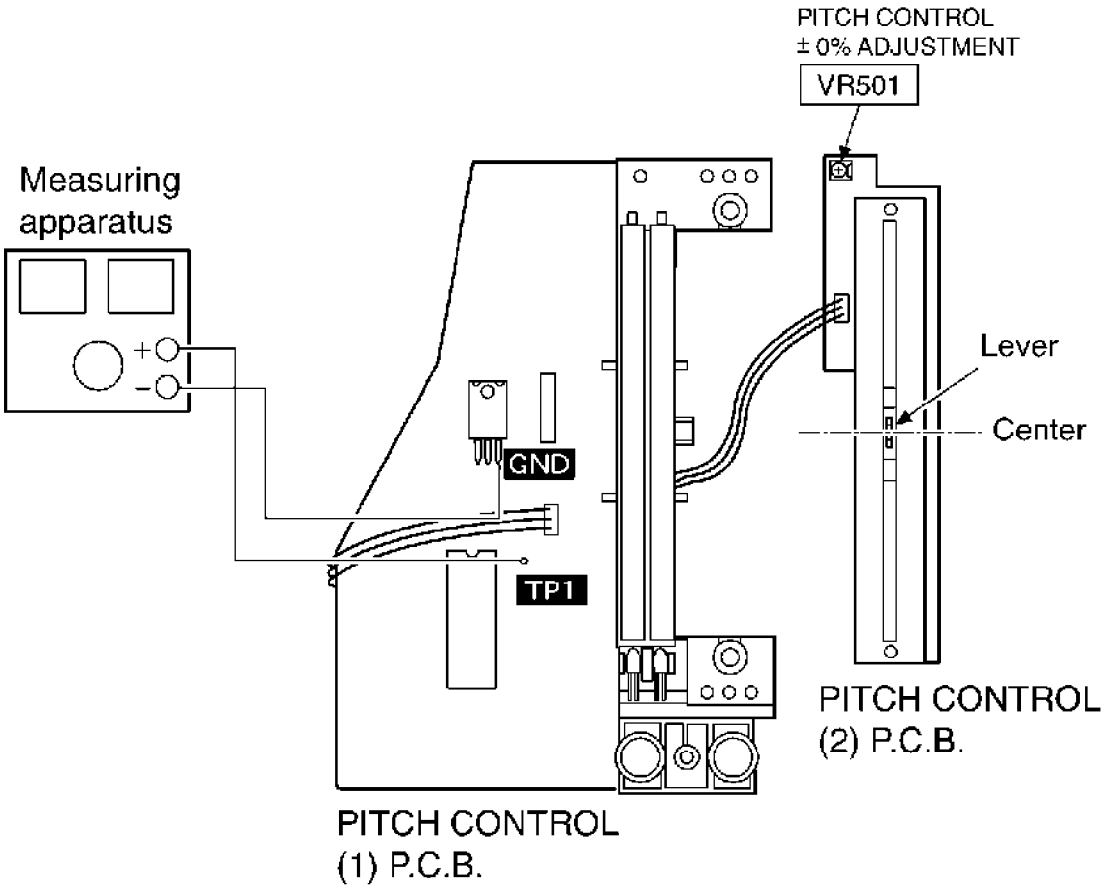
1. **Connect the frequency counter [(+):TP1, (-):GND] and turn the power supply ON.**
2. **Set the pitch control knob (VR303) to “0” (center position).**
   (Indicator lights up.)
3. **Adjust VR501 so that the output becomes the maximum.(Fig.2)**

9.2.2. Brake adjustment (BRAKE)

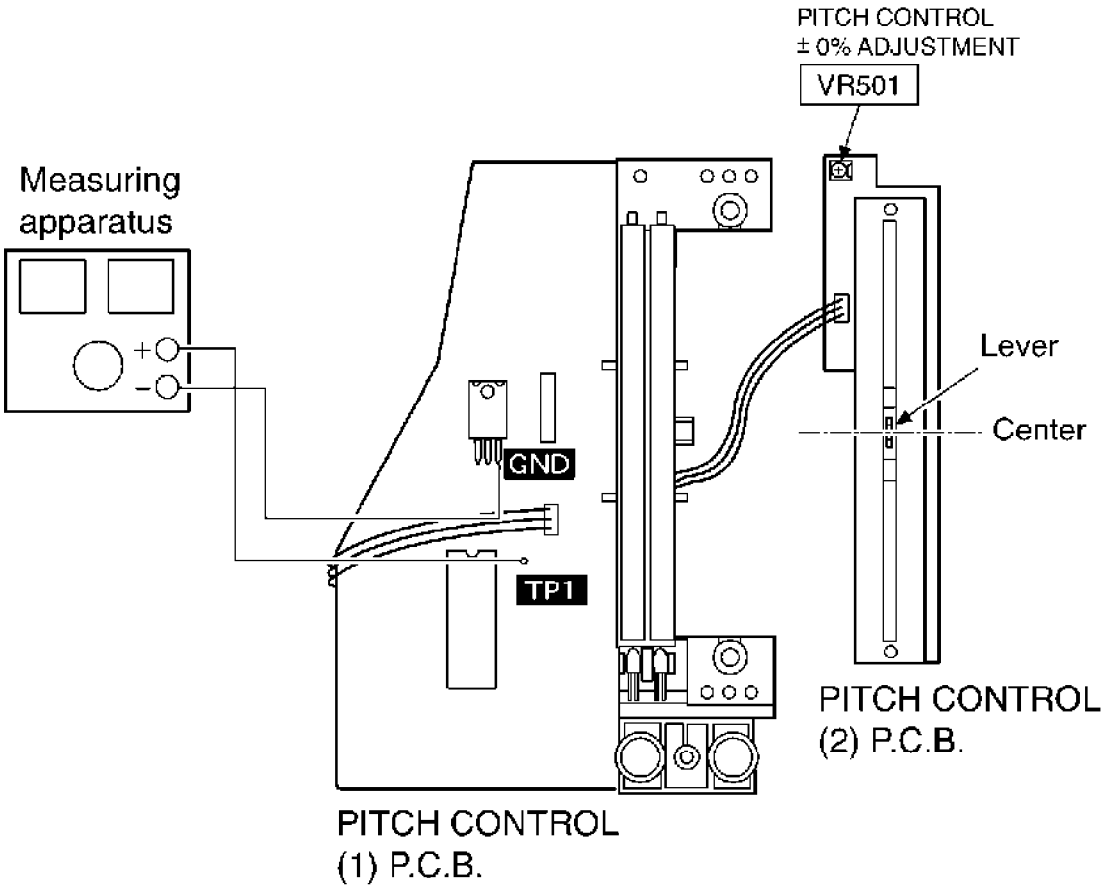
1. **Adjust VR201 so that the rotation at 33-1/3 r/min stops within the stop range after pressing the stop button.(Fig.1) (Fig.3)**

9.3. Alignment points

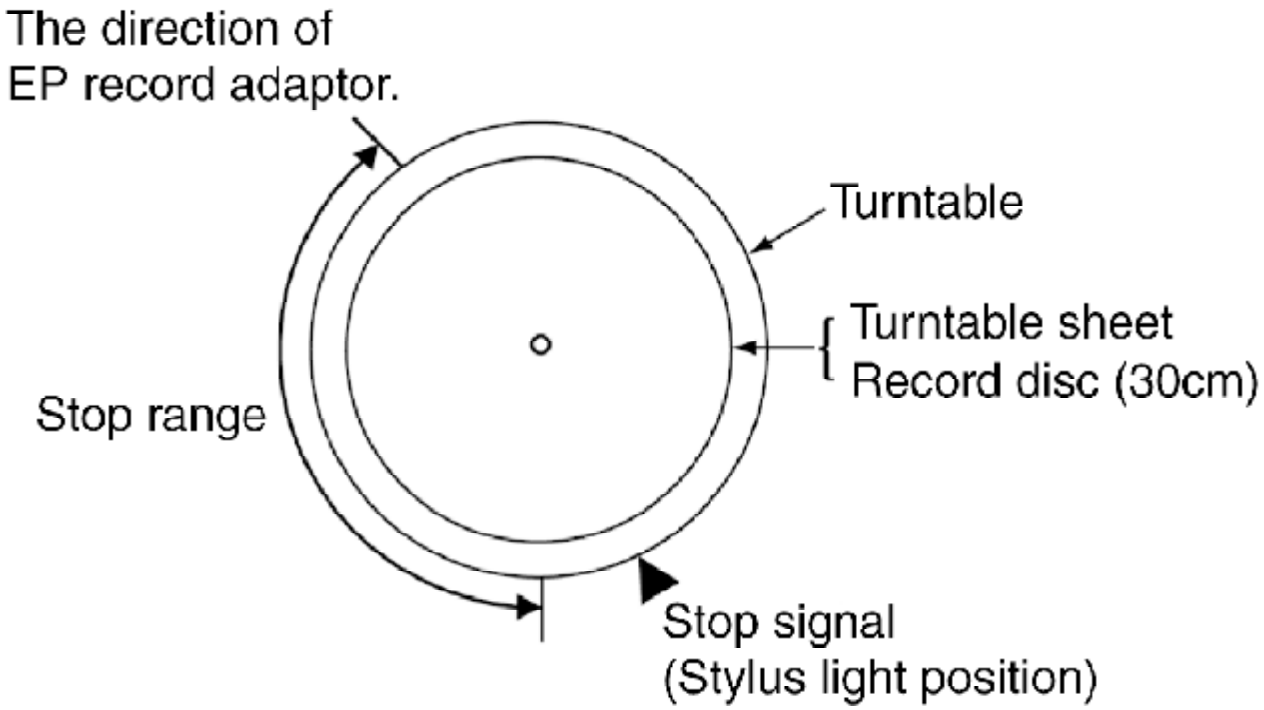
(Fig.1)


PITCH CONTROL
± 0% ADJUSTMENT
VR501
Measuring
apparatus
+
–
GND
TP1
Lever
Center
PITCH CONTROL
(2) P.C.B.
PITCH CONTROL
(1) P.C.B.

(Fig.2)


PITCH CONTROL
± 0% ADJUSTMENT
VR501
Measuring
apparatus
+
–
GND
TP1
Lever
Center
PITCH CONTROL
(2) P.C.B.
PITCH CONTROL
(1) P.C.B.

(Fig.3)



10. Schematic Diagram

10.1. Schematic Diagram Notes

S201:
SPEED SELECTOR (33-1/3r/min) switch.

S202:
SPEED SELECTOR (45 r/min) switch.

S203:
START/STOP switch in “OFF” position.

S401:
STYLUS ILLUMINATOR switch in “ON” position.

S501:
PITCH RESET switch in “ON” position.

S502:
PITCH SELECT (±8%/±16%) switch in “±16%” position.

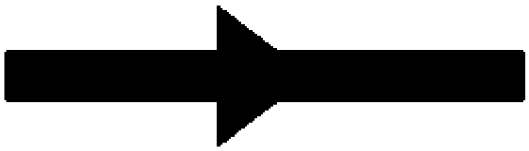
S601:
POWER switch in “ON” position.

S602:
VOLTAGE SELECTOR switch in “220-240V” position. [E,EB,GN]

VR201:
BRAKE ADJUSTMENT VR.

VR303:
PITCH CONTROL ADJUSTMENT VR.

VR501:
PITCH CONTROL ±0% ADJUSTMENT VR.

- **The voltage value and waveforms are the reference voltage of this measured by DC electronic voltmeter (high impedance) and oscilloscope on the basis of chassis.**
  Accordingly, there may arise some errors in the voltage values and waveforms depending upon the internal impedance of the tester or the measuring unit.
  No mark: Voltage when at a stop
  ( ):Voltage during rotation
- **Signal line**
-  **: +B line**
- **Important safety notice:**
  Components identified by ⚠ mark have special characteristics important for safety. When replacing any of these components, use only manufacture’s specified parts.
- **This schematic diagram may be modified at any time with the development of new technology.**

10.2. Schematic Diagram

11. Printed Circuit Board Diagram

12. Block Diagram

13. Wiring Connection Diagram

14. Replacement Parts List

Note:

- **All parts are supplied by SPC .**
- **Important safety notice:**
- **Components identified by ⚠ mark have special characteristics important for safety.**
- **Furthermore, special parts which have purposes of fireretardant (resistors), high-quality sound (capacitors), low-noise (resistors), etc. are used.**
- **When replacing any of components, be sure to use only manufacture's specified parts shown in the parts list.**
- **The parenthesized indications in the Remarks columns specify the areas. Parts without these indications can be used for all areas.**
- **(E): SL-1210M5GE**
- **(EB): SL-1210M5GEB**

- **(GN): SL-1210M5GGN**
- **(PP): SL-1210M5GPP**
- **Capacity values are in microfarads (uF) unless specified otherwise, P=Pico-farads (pF) F=Farads (F)**
- **Resistance values are in ohms, unless specified otherwise, 1K=1,000 (OHM), 1M= 1,000k (OHM)**
- **The marking <RTL> indicates the retention time is limited for this item. After the discontinuation of this assembly in production, it will no longer be available.**

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
1	SFMZ172-01E	FC COIL ASS'Y	1	
2	SFMG520-31A	DRIVE COIL ASS'Y	1	
3	SFMGQ20-01	DRIVE COIL COVER	1	
4	XTN26+6J	SCREW	3	
5	N092	SPACER	1	
6	REZ1507	WIRE KIT	1	
7	REZ1547	WIRE KIT	1	
8	RGU2168-S1	KNOB,RESET	2	
9	RMQ1194	SHEET	2	
10	RMR1501-K	BASE	1	
11	RMR1502-Q	LED PLATE	2	
12	XYN3+F8	SCREW	2	
18	RGN2481-K	NAME PLATE	1	(E)
18	RGN2482-K	NAME PLATE	1	(EB)
18	RGN2483-K	NAME PLATE	1	(GN)
18	RGN2484-K	NAME PLATE	1	(PP)
19	RMR1112-K	SHELL STAND	1	
20	RMZ0584-1	BARRIER	1	(E,EB,GN)
21	RGK0942AZ-S	COVER,STROBE ILLUMINATOR	1	
22	RMR1111B-K	BASE,OPERATION	1	
23	RYQ0309-K	KNOB,POWER	1	
24	REZ1544	WIRE KIT	1	
25	SFUM015-11	LED SPACER	2	
26	SFKT015-013E	BUTTON,SPEED SELECT(33)	1	
27	SFKT015-023E	BUTTON,SPEED SELECT(45)	1	
28	SFKT015-063A	BUTTON,START/STOP	1	
29	SFQA122-011	SPRING	1	
30	SFQA520-01	SPRING	1	
31	SFUM122-03	CUM	1	
32	SFUZ122-04	SHEET	1	
33	SFXW910J02	WASHER	1	
34	SFYB5-32	STEEL BALL	1	
35	XTV3+8G	SCREW	1	
36	XUC3FY	WASHER	2	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
37	REZ1548	WIRE KIT	1	
38	RGK1603Z-S	LAMP CASE ASS'Y	1	
41	RMX0243	LED SPASER	1	
42	RTW-12	WASHER	1	
44	SFGZ122-021	RUBBER	1	
45	SFQA122-02	SPRING	1	
46	SFQA172-01	SPRING	1	
47	SFQA520-011	SPRING	1	
48	SFUP122-02E	BRACKET,ILLUMINATOR	1	
49	SFUP122-03	PLATE,LOCK OPERATION	1	
50	SFUP122-15-1	STOPPER,SPRING	1	
51	SFX0172-01-1	PIN,GUIDE	1	
52	SFXJ172-011	PIN,LOCK CANCELLER	1	
53	SFXJ172-05	PIN	1	
55	XSN2+10	SCREW	2	
57	XUC25FY	WASHER	1	
58	XUC2FY	WASHER	1	
59	XWE3D8	WASHER	1	
60	XYN3+C15S	WASHER	1	
61	SFGC122-04E	INSULATOR	4	
62	SFKT122-022A	KNOB,PITCH CONTROL	1	
63	SFMZQ20-09A	SHAFT	1	
64	SFUM172-043A	ORNAMENT,ILLUMINATOR	1	
65	SFUP122N11E	AC CORD ASS'Y	1	(E) ⚠
65	SFUP122G11E	AC CORD ASS'Y	1	(EB) ⚠
65	SFUP122L11E	AC CORD ASS'Y	1	(GN) ⚠
65	SFUP122M12E2	AC CORD ASS'Y	1	(PP) ⚠
66	SFUP122-23C	HINJI-PLATE-A	2	
68	SFXG122-01	SCREW	4	
69	SFXG122-02	SCREW	11	
70	SFXG172-01	SCREW	3	
71	SFXGQ20-021	SCREW	3	
72	SFXW172-032	SPACER	1	
73	SNSB10	SCREW	3	
74	SNSB9-2	SCREW	6	
75	XTB3+10JFZ	SCREW	4	
76	XTB3+8J	SCREW	11	
77	XTN3+8JFZ	SCREW	5	
78	XTV23+10G	SCREW	1	
79	XTW3+15T	SCREW	12	
80	XTW3+8T	SCREW	3	
81	RYQ0154B-S	ARM ASS'Y	1	
81-1	RGZ0053Z-S	ADJUST KNOB	1	
82	RJL4P002S12	PHONO CORD	1	
83	SFEL026-01E2	GROUND WIRE	1	
84	SFPZB12203-1	PLATE,ARM BASE COVER	1	
85	SFPAB13202	KNOB,LIFT	1	
86	SFPAB18201K1	TONEARM FIXING PLATE	1	
87	SFPJL18202K	OIL DAMPER	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
88	SFPKD12201-1	BRACKET,ARM BASE	1	
89	SFPAB17206A	KNOB,ANTI-SKATING CONTROL	1	
90	RFKN1200M5GB	ARM BASE ASS'Y	1	
91	XTW26+6S	SCREW	1	
92	SFPRT17201K1	ARMREST ASS'Y	1	
93	SFPRT18201K	ARM LIFT	1	
94	SFPZB12201K	PLATE	1	
95	SFPZB17202A	KNOB,ARM LOCK	1	
96	SFQA829-03	SCREW	1	
97	SFXG829-1	SCREW	1	
98	XTN3+6J	SCREW	3	
99	XTN3+8J	SCREW	1	
100	XTW3+6T	SCREW	3	
101	XUC25FY	WASHER	1	
102	XUC5FY-V	WASHER	1	
103	XWE4A10BW	WASHER	1	
104	SFPWG17201BK	BALANCE WEIGHT	1	
105	SFPZB12204	CLAMPER,PHONO CORD	1	
106	SFUM170-061	SPACER,PHONO CORD	1	
107	XTB3+6JFZ	SCREW	2	
108	XTW3+12TFZ	SCREW	2	
109	XTW3+8T	SCREW	1	
110	XYE3+CJ25	SCREW	1	
111	XYN3+C8FZS	SCREW	2	
112	RKM0101K-K	CABINET	1	
113	RYF0370A-X	DUST COVER ASSY	1	
113-1	RMG0483-K	DUST COVER RUBBER	2	
115	SFAU122-025	BOTTOM COVER A	1	(E)
115	SFAU122P025	BOTTOM COVER A	1	(PP)
116	SFAU122-034	BOTTOM COVER B	1	
117	SFTE172-01Z1	TURNTABLE ASS'Y	1	
118	SFUM172-055	PANEL COVER	1	(E,EB)
118	SFUM172-054	PANEL COVER	1	(PP,GN)
119	SFPCC31006K	SHELL ASS'Y(S)	1	
119-1	REZ1037-2	SHELL WIRE	1	
119-2	RFE0046	SP SHELL WEIGHT	1	
120	RGS0008	T/T RUBBER MAT	1	
121	SFGC122-01	RUBBER	3	
122	SFER190-01	LUG TERMINAL	2	
123	REZ0668	LED SPACER	1	
124	RGG0219Z-K	ORNAMENT	1	
125	SFER1C	LUG	2	
126	XSB3+8FZ	SCREW	2	
127	RMQ1208	TAPE	1	
128	SFPEW17201	WASHER	1	
129	SMXB5	SW BARRIER	1	(EB,GN)
130	SFNZ520M31	CAUTION LABEL	1	(E,EB,GN)
130	SFNZ520C32	CAUTION LABEL	1	(PP)
131	RQLA0263	CAUTION LABEL,V.SETTING	1	(E,EB,GN)
131	SFUP015-13	COVER	1	(PP)

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
132	SFNZ10EC01	CAUTION LABEL	1	(E,EB,GN)
133	RQLA0385	LAVEL,V.INDICATION	1	(E,EB,GN)
134	SFNZ023S01	CAUTION LABEL	1	(E,EB,GN)
135	RQLS0091-1	DOC LABEL	1	(PP)
136	RQLS0102	FCC LABEL	1	(PP)
137	RQLS0134-1	CAUTION LABEL	1	(E,EB,GN)
137	SQZB8	CAUTION LABEL	1	(PP)
A1	RQT7019-E	O/I BOOK	1	(E)Spanish, French, Germany, Duch, Swedish, Itarian, Polish, Czech, Danish
A1	RQT7020-B	O/I BOOK	1	(E,EB,GN) English
A1	RQT7021-Y	O/I BOOK	1	(PP) English, Canadian French
A3	SFWE010A	EP RECORD ADAPTOR	1	
A4	RHN26003	CARTRIDGE NUT	2	
A5	SFCZV8801-1	SCREW	2	
A6	SFPEV9801-1	SCREW	2	
A7	SFPEW9601	WASHER	2	
A8	SFPZB3501	SHELL WEIGHT	1	
A9	SFPWG17202	AUXILIARY WEIGHT	1	
A10	SFK0135-01	OVERHANG GAUGE	1	
A11	RGS0005Z	DISC SLIP SHEET ASSY	1	
A12	RQLC0142-1	TECHNICS LABEL	1	
A13	RQCA1082	NOTE SHHET	1	(E)
A13	RQCA1081	NOTE SHEET	1	(PP,EB,GN)
C1	ECA1HM471S	50V 470U	1	
C2	RCE1EU330BV	25V 33U	1	F2A1E330A014
C3	ECEA1EKA220B	25V 22U	1	
C5,C6	ECQM1223KZ3	125V 0.022U	2	
C101-03	RCE1EU330BV	25V 33U	3	F2A1E330A014
C104-07	ECQV1H104JM3	50V 0.1U	4	
C108	ECA1EAM101XB	25V 100U	1	
C109,10	ECQV1H104JM3	50V 0.1U	2	
C111	ECQB1H562JF3	50V 5600P	1	
C112	ECEA1HKA4R7	50V 4.7U	1	
C201	RCE1AKA330BG	10V 33U	1	F2A1A330A011
C202,03	ECA1HAK010XI	50V 1U	2	
C204	ECQV1H473JM3	50V 0.047U	1	
C205	ECA0JM221	6.3V 220U	1	
C206	ECA1HAK010XI	50V 1U	1	
C207	ECCR1H101K5	50V 100P	1	
C208	ECCR1H220KU5	50V 22P	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
C209	RCE1AU101BV	10V 100U	1	F2A1A101A019
C210,11	ECQV1H224JM3	50V 0.22U	2	
C212	RCE1HKA3R3BG	50V 3.3U	1	F2A1H3R3A015
C213	ECCR1H471K5	50V 470P	1	
C214	RCE1AU101BV	10V 100U	1	F2A1A101A019
C215	ECA1HAK010XI	50V 1U	1	
C216	RCE1AKA470BG	10V 47U	1	F2A1A470A011
C217-19	ECFF1H104ZF5	50V 0.1U	3	
C306	ECA1HAK010XI	50V 1U	1	
C501-03	ECFF1H104ZF5	50V 0.1U	3	
C504,05	ECCR1H220KU5	50V 22P	2	
C601	ECQU2A473MY	100V 0.047U	1	⚠
CN101	EMCS0360L	PLUG	1	K1KA03A00188
CN102	EMCS0460L	PLUG	1	K1KA04A00211
CN103	EMCS0760L	PLUG	1	K1KA07A00105
CN104	SJT3907	CONNECTOR	1	K1KA09A00049
CN105	K1KA02A00008	CONNECTOR	1	
CN106	RJP3G18ZA	PLUG	1	K1KA03A00213
D1	D2SBA20	DIODE	1	B0EBKM000013
D3	MA4051M	DIODE	1	MAZ40510M
D201,02	SVDPR3902S-9	LED	2	B3AAA0000446
D203,04	LN21CAL	LED	2	
D204A	MA165TA5	DIODE	1	MA2C16500E
D205,06	LN21CAL	LED	2	
D301	MA4051M	DIODE	1	MAZ40510M
D401	B3AFA0000034	LED	1	
D501,02	LMW9A8BYB0A1	LED	2	
D504	MA4051M	DIODE	1	MAZ40510M
D505	B3AEA0000008	BLUE LED	1	
D506	MA4030LTA	DIODE	1	MAZ40300LF
F1	XBA2C025TB0	FUSE	1	K5D251BL0002 (E,EB,GN) ⚠
F1	K5D251AQ0002	FUSE	1	(PP) ⚠
F2	K5D102BA0003	FUSE	1	(E,EB,GN) ⚠
F2	XBA1F12NU14	FUSE	1	K5D122AD0002 (PP) ⚠
IC101	AN6675	IC	1	
IC201	AN6680	IC	1	
IC302	TC4011BP	IC	1	C0JAAC000090
IC501	C2BAED000009	IC	1	
IC502	NJM78M05FA	IC	1	C0CAADE00007
P1	RPG6576	PACKING CASE	1	(E)
P1	RPG6577	PACKING CASE	1	(EB)
P1	RPG6578	PACKING CASE	1	(GN)
P1	RPG6579	PACKING CASE	1	(PP)
P2	SFHH122-011	CUSHION,FRONT	1	

12	SPH122-011	CUSHION,FRONT	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
P3	SFHH122-02	CUSHION,REAR	1	(PP,E)
P3	RPN0710	CUSHION,REAR	1	(EB,GN)
P4	SFHD122N05-1	PAD,TOP	1	(PP,E)
P4	RPQ0365-1	PAD,TOP	1	(EB,GN)
P5	SFHD122-02	PAD(A)	1	
P6	RPN0306	PAD(B)	1	
P7	RPH0133	PROTECTION SHEET	1	
P8	SFHZ122-01	PROTECTION SHEET	1	
P9	XZB60X65A01X	POLYETHYLENE BAG	2	
P10	XZB45X50A01X	POLYETHYLENE BAG	1	
P11	SFYF09A15Z	PROTECTION BAG	2	
P12	XZB05X06C03Z	PROTECTION BAG	2	
P14	XZB25X34C03X	PROTECTION BAG	1	
P17	RPQ0608	PAD,TONEARM	1	
P18	RPQ0606	SPACER(A)	1	
P19	RPQ0607	SPACER(B)	1	
P20	RPQ1516	PROTECTION COVER	2	
P21	XZB10X30C03Z	PROTECTION BAG	1	(EB,GN)
PCB1	REP3461B-M	PCB ASS'Y MAIN	1	[RTL]
PCB2	REP2093A-1	PCB ASS'Y POWER	1	[RTL](E)
PCB2	REP2346A-1	PCB ASS'Y POWER	1	[RTL](EB,GN)
PCB2	SFDP122C09E	PCB ASS'Y POWER	1	[RTL](PP)
PCB3	REP3458BA-S	PCB ASS'Y PITCH CONTROL(1	1	[RTL]
PCB4	REP3458BB-S	PCB ASS'Y PITCH CONTROL(2	1	[RTL]
PCB5	REP3552A-S	PCB ASS'Y OPERATION	1	[RTL]
PCB6	REP3553A-S	PCB ASS'Y LED SW	1	[RTL]
PCB7	SFDH122-09E3	PCB ASS'Y,OUTPUT	1	[RTL]
Q1	2SD126507	TRANSISTOR	1	
Q2,Q3	2SD637-QRS	TRANSISTOR	2	2SD06370W
Q201	2SC1846-QRS	TRANSISTOR	1	2SC18460W
Q202	2SD637-QRS	TRANSISTOR	1	2SD06370W
Q203	2SC2458GR	TRANSISTOR	1	
Q501	UN4115	TRANSISTOR	1	UNR4115
R1	ERDS2FJ562	1/4W 5.6K	1	
R2	ERDS2TJ682T	1/4W 6.8K	1	
R3	ERDS2TJ272T	1/4W 2.7K	1	
R4,R5	ERDS2FJ471	1/4W 470	2	
R101	ERDS2FJ103	1/4W 10K	1	
R102	ERX1ANJ4R7H	1W 4.7	1	
R103	ERDS2FJ472	1/4W 4.7K	1	
R104	ERDS2FJ473	1/4W 47K	1	
R105	ERDS2FJ103	1/4W 10K	1	
R106	ERDS2FJ150	1/4W 15	1	
R107	ERX1ANJ1R5H	1W 1.5	1	
R108	ERDS2FJ103	1/4W 10K	1	
R109,10	ERX1ANJ4R7H	1W 4.7	2	
R201	ERG1ANJ561H	1W 560	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
R202	ERDS2FJ103	1/4W 10K	1	
R203	ERDS2FJ470	1/4W 47	1	
R204	ERDS2TJ272T	1/4W 2.7K	1	
R205	ERDS2TJ124	1/4W 120K	1	
R206	ERDS2TJ183	1/4W 18K	1	
R207	ERDS2FJ563	1/4W 56K	1	
R208	ERDS2FJ224	1/4W 220K	1	
R209	ERDS2FJ334	1/4W 330K	1	
R210	ERDS2TJ183	1/4W 18K	1	
R211	ERDS2FJ472	1/4W 4.7K	1	
R212	ERDS2FJ151	1/4W 150	1	
R213	ERDS2FJ122	1/4W 1.2K	1	
R214	ERDS2FJ223	1/4W 22K	1	
R215	ERDS2FJ472	1/4W 4.7K	1	
R216	ERDS2FJ154	1/4W 150K	1	
R217	ERDS2FJ223	1/4W 22K	1	
R218	ERDS2FJ102	1/4W 1K	1	
R219	ERDS2FJ332	1/4W 3.3K	1	
R220	ERDS2FJ221	1/4W 220	1	
R221	ERDS2FJ471	1/4W 470	1	
R222	ERDS2FJ391	1/4W 390	1	
R304	ERDS2FJ561	1/4W 560	1	
R305	ERDS2TJ181	1/4W 180	1	
R306	ERDS2FJ223	1/4W 22K	1	
R307	ERDS2TJ272T	1/4W 2.7K	1	
R501	ERDS2FJ103	1/4W 10K	1	
R502	ERDS2FJ102	1/4W 1K	1	
R503	ERDS2FJ221	1/4W 220	1	
R504,05	ERDS2FJ820	1/4W 82	2	
R506	ERDS2FJ103	1/4W 10K	1	
R507	ERDS2FJ821	1/4W 820	1	
R508	ERDS2FJ472	1/4W 4.7K	1	
R508A	ERDS2FJ102	1/4W 1K	1	
R509,10	ERDS1TJ222	1/2W 2.2K	2	
R601	ERC12UGK335D	1/2W 3.3W	1	(EB,GN) ⚠
R601	ERDS1FJ4R7	1/2W 4.7	1	(PP,E) ⚠
S201,02	EVQQS204B	SW	2	
S203	SFDSSS01GL13	SW	1	K0KACG000006
S401	SFDSD2MSL-C	SW	1	
S501,02	K0F122B00099	SW	2	
S601	SFDSSS5GL13P	SW	1	K0KACG000007 ⚠
S602	SFDSHXW01317	SW	1	K0ZZ00000489 (E,EB,GN) ⚠
T1	SFDZ122M01E	POWER TRANSFORMER	1	(PP) ⚠
T1	SFDZ122S01E	POWER TRANSFORMER	1	(E,EB,GN) ⚠
VR201	D2BCA54B0005	VR	1	

Ref. No.	Part No.	Part Name & Description	Pcs	Remarks
VR303	SFDZ122N11-4	SLIDE VR	1	
VR501	EVND8AA03B22	VR	1	
X201	RSXB4M13J01	CRYSTAL OSCILLATOR	1	H0H419400004
X501	RSXB4M13J01	CRYSTAL OSCILLATOR	1	H0H419400004
KIT1	RFKBL120M5GK	PITCH ADJ. VR	1	

15. Cabinet Parts Location

15.1. Cabinet

15.2. Tonearm

16. Packaging

17. Schematic Diagram for printing with A4 size

K0303YH

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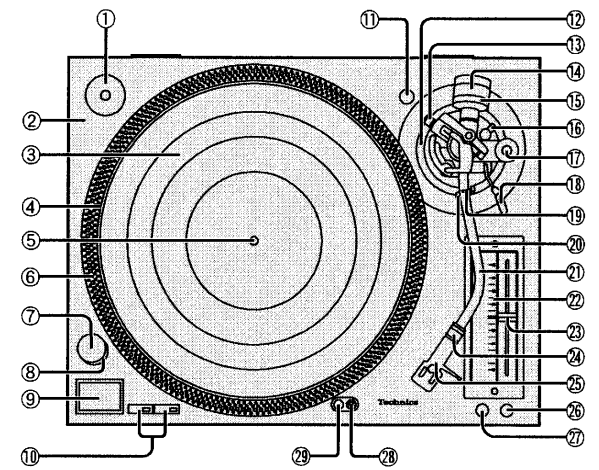
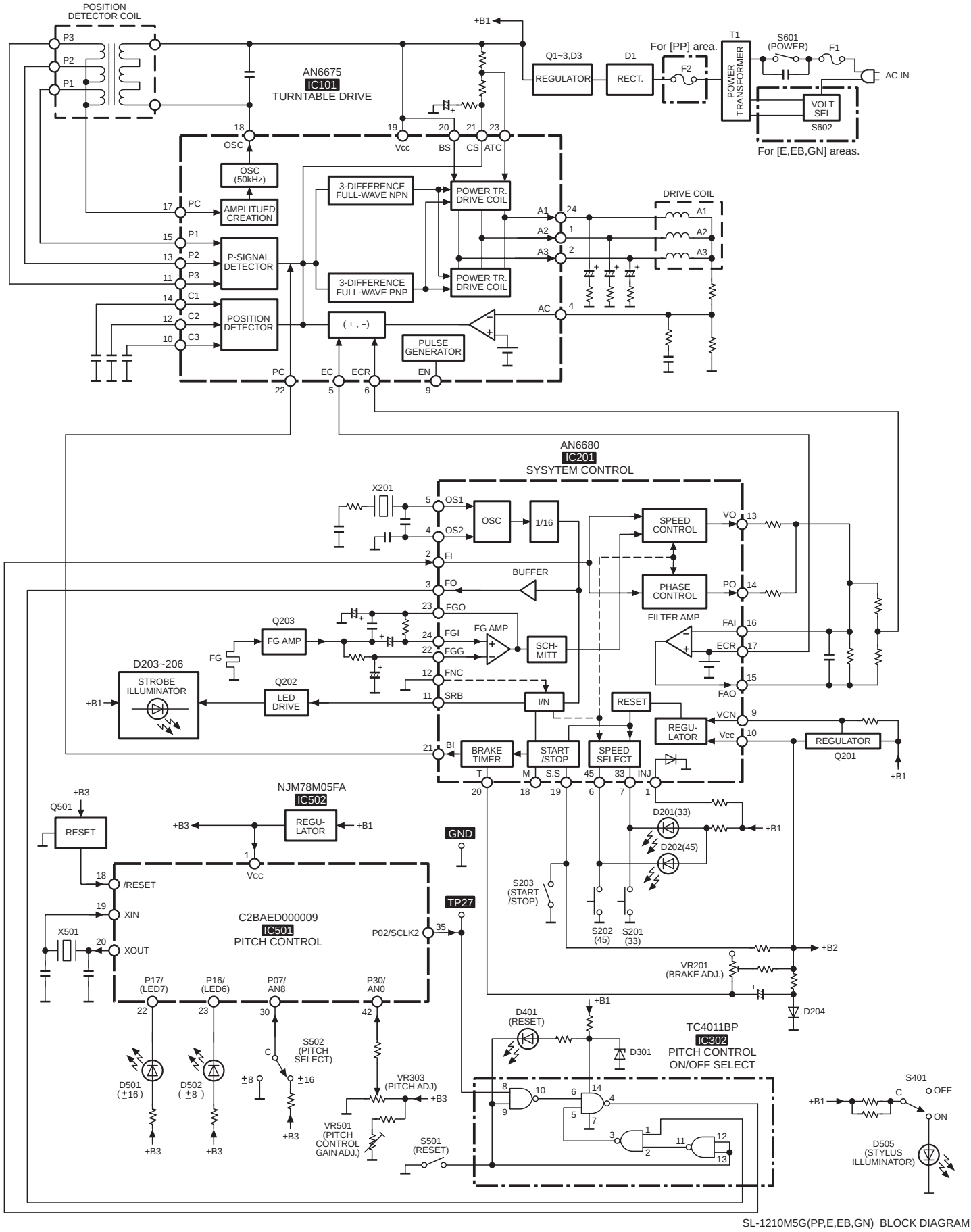


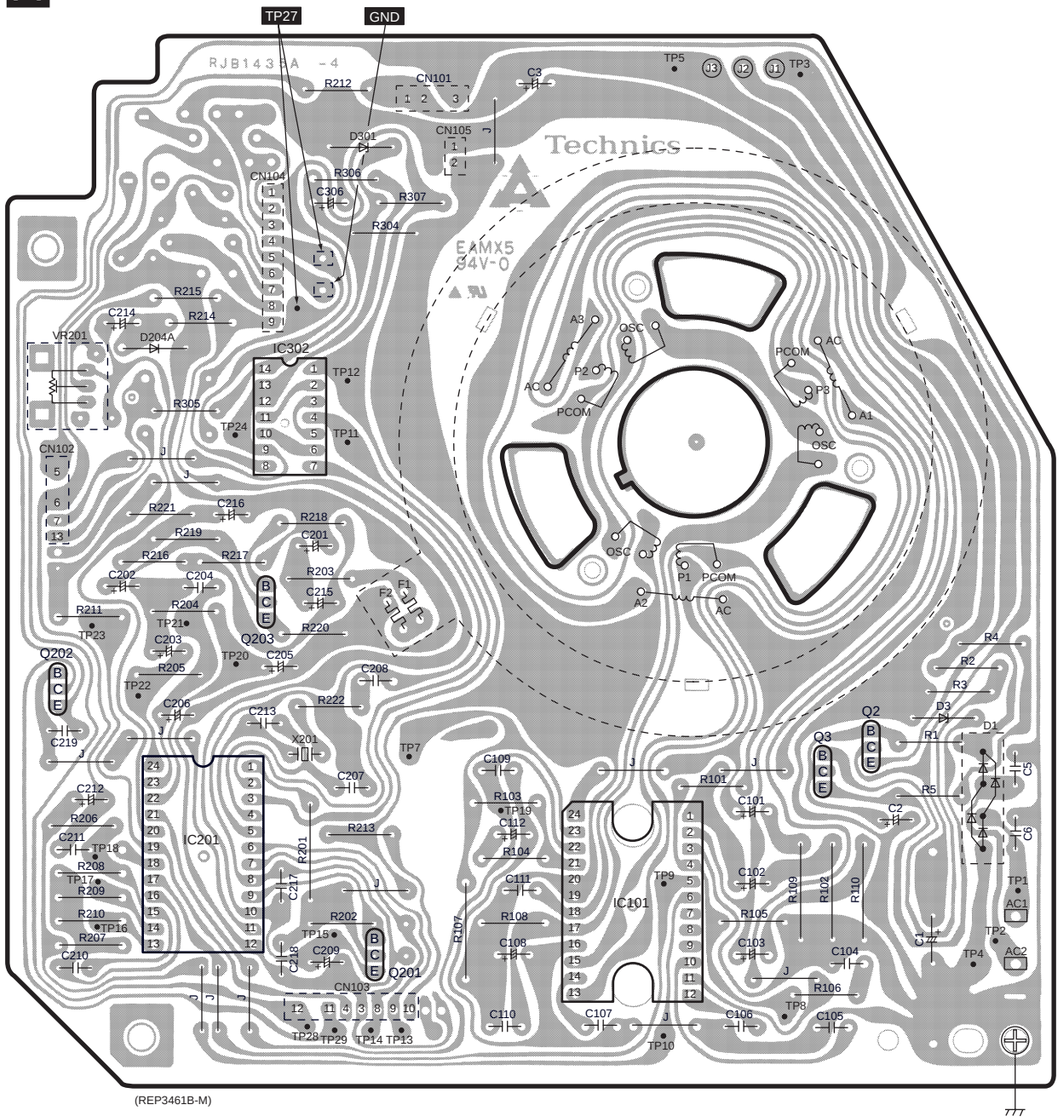
No.	Name
①	EP record adaptor
②	Turntable base
③	Turntable mat (Or disc slip sheet)
④	Turntable
⑤	Center spindle
⑥	Strobe mirrors
⑦	Power switch (power)
⑧	Strobe light, pilot lamp
⑨	Start-stop button (start-stop)
⑩	Speed select buttons (33, 45)
⑪	Shell stand
⑫	Arm-height control
⑬	Horizontal weight control knob
⑭	Balance weight
⑮	Stylus pressure control
⑯	Arm lock
⑰	Anti-skating control
⑱	Cue lever
⑲	Arm clamp
⑳	Arm rest
㉑	Tone arm
㉒	Pitch indicator
㉓	Pitch control (pitch adj.)
㉔	Locking nut
㉕	Head shell
㉖	Reset button (reset)
㉗	Variable range pitch button (±16/±8)
㉘	Stylus light switch
㉙	Stylus light



SL-1210M5G(PP,E,EB,GN) BLOCK DIAGRAM

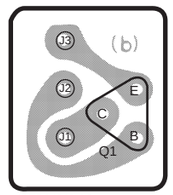
Note: This printed circuit board diagram may be modified at any time with the development of new technology.

A DRIVE CONTROL P.C.B.



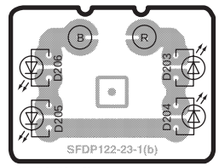
(REP3461B-M)

C REGULATOR P.C.B.



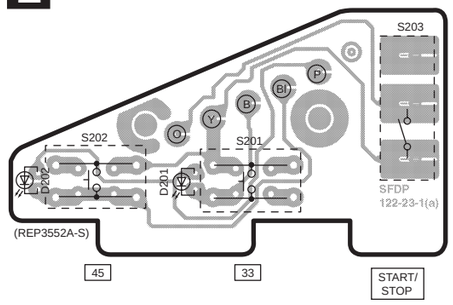
(REP3461B-M)

D STROBE ILLUMINATOR P.C.B.



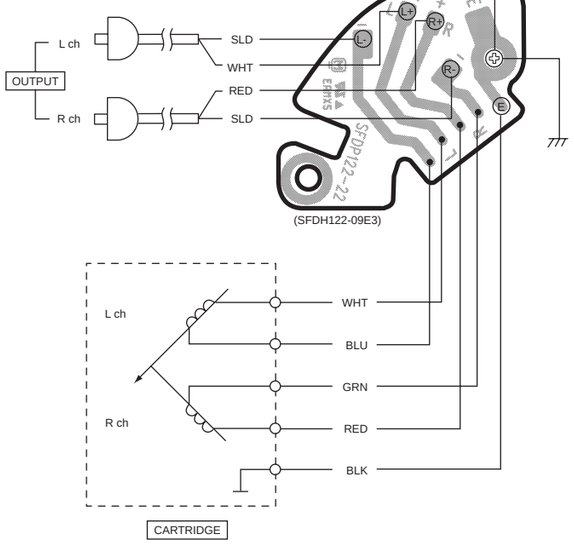
(REP3552A-S)

E SPEED SELECTOR P.C.B.

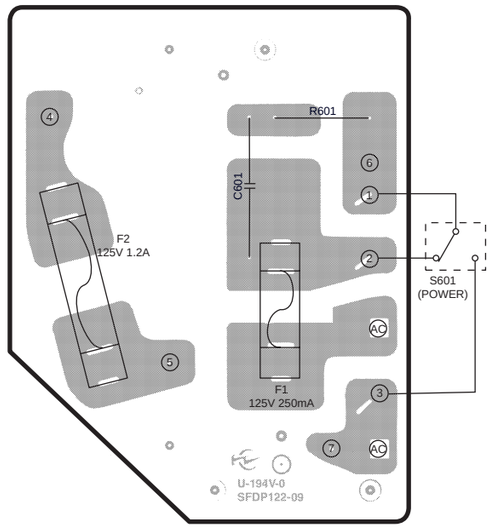


(REP3552A-S)

I OUTPUT P.C.B.

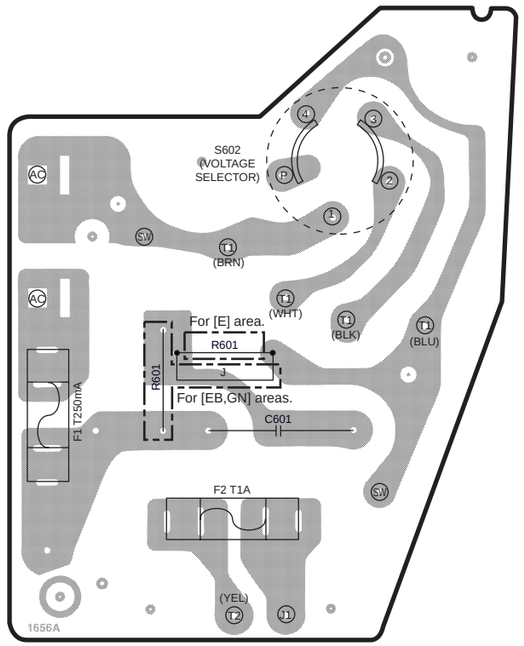


B POWER SUPPLY P.C.B.
For [PP] area.



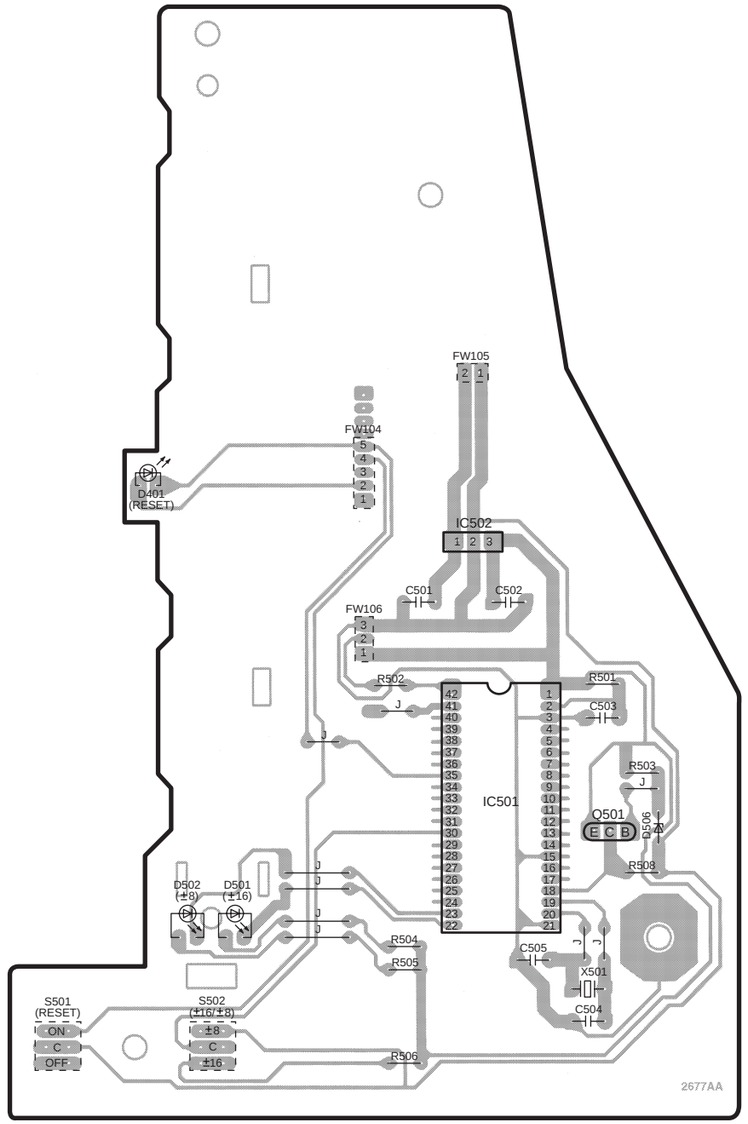
(SFDP122C09E)

B POWER SUPPLY P.C.B.
For [E,EB,GN] areas.



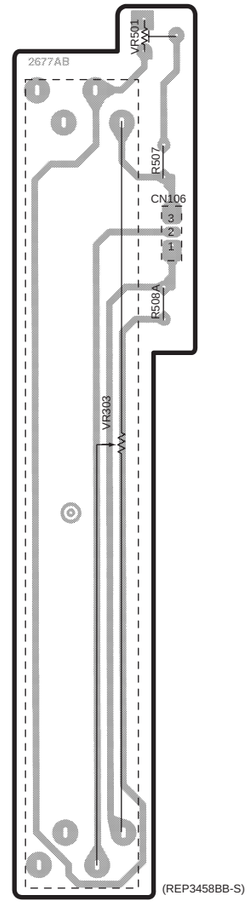
(REP2093A-1 ..... [E]
REP2346A-1 ..... [EB,GN])

H PITCH CONTROL(1) P.C.B.

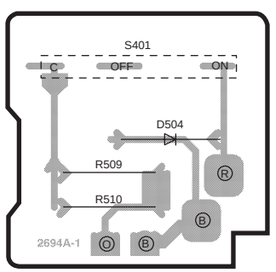


(REP3458BA-S)

F PITCH CONTROL(2) P.C.B.



G STYLUS ILLUMINATOR SWITCH P.C.B.



(REP3553A-S)

A DRIVE CONTROL CIRCUIT

B POWER SUPPLY CIRCUIT

For [PP] area.

For [EB,GN] areas.

For [E] area.

C REGULATOR CIRCUIT

Q1 2SD126507 REGULATOR

Q2,3 2SD637-QRS REGULATOR

IC302 TC4011BP PITCH CONTROL ON/OFF SELECT

IC502 NJM78M05FA REGULATOR

IC501 C2BAED000009 PITCH CONTROL

Q501 UN4115TA RESET

IC201 AN6680 SYSTEM CONTROL

Q201 2SC1846-QRS REGULATOR

Q202 2SD637-QRS LED DRIVE

Q203 2SC2458GR FG AMP

IC101 AN6675 TURNTABLE DRIVE

D201.202 SVDPR3902S-9

D203–206 LN21CAL (STROBE ILLUMINATOR)

D501 LMW9A8BYB0A1 (±16)

D502 LMW9A8BYB0A1 (±8)

D401 B3AFA0000034 (RESET)

D504 MA4051MTA (STYLUS ILLUMINATION)

D505 B3AEA0000008 (STYLUS ILLUMINATION)

H PITCH CONTROL(1) CIRCUIT

F PITCH CONTROL(2) CIRCUIT

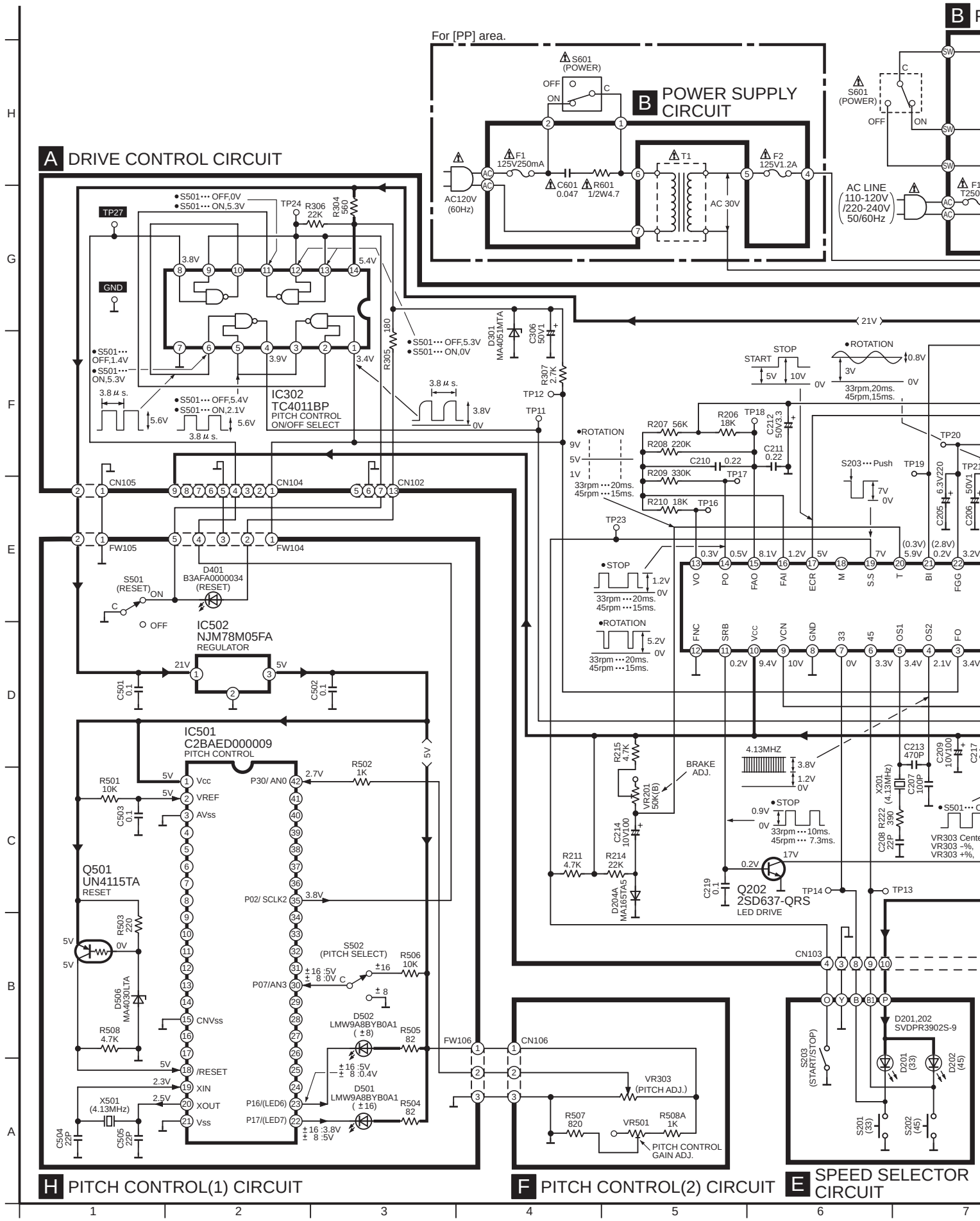
E SPEED SELECTOR CIRCUIT

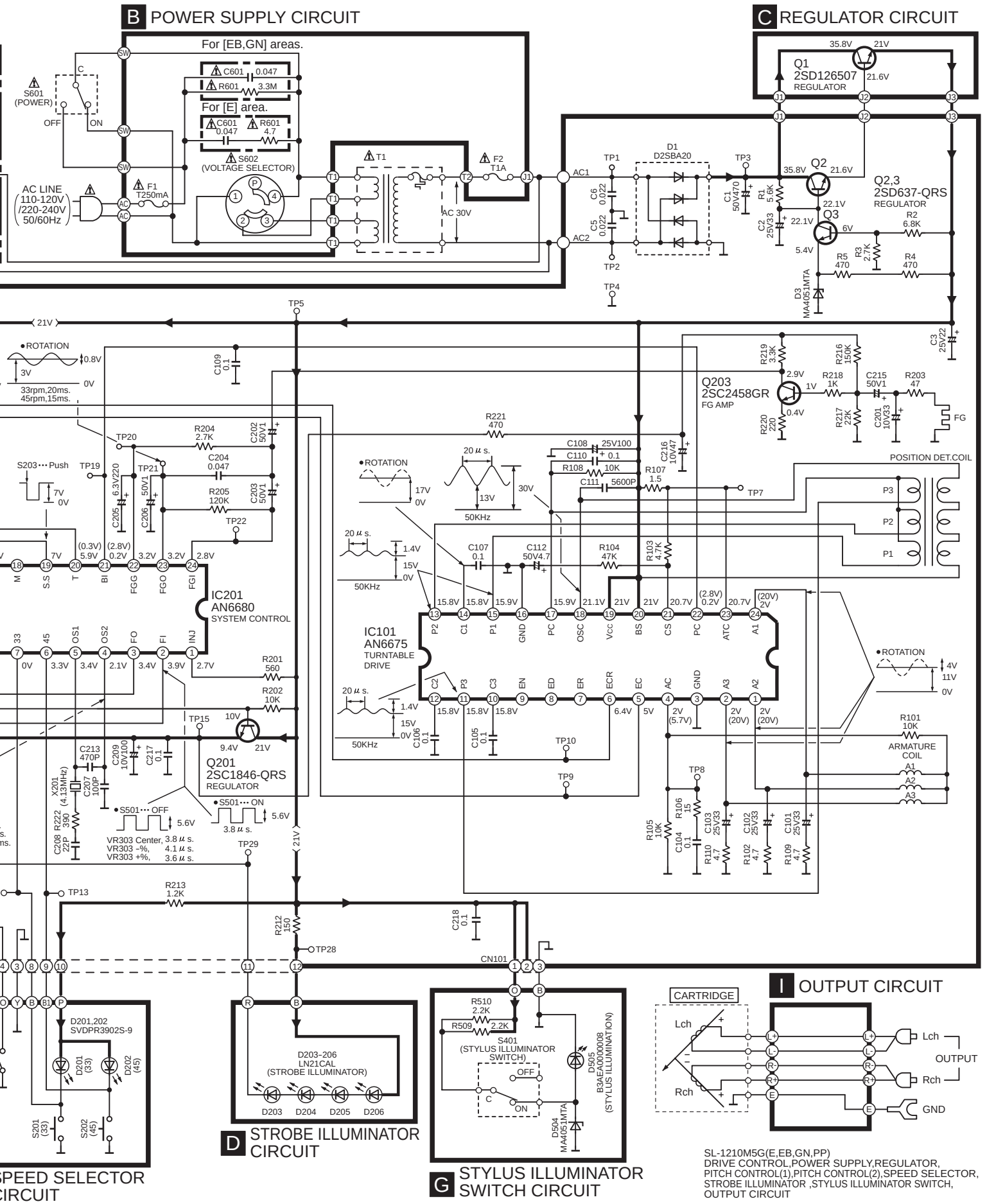
D STROBE ILLUMINATOR CIRCUIT

G STYLUS ILLUMINATOR SWITCH CIRCUIT

I OUTPUT CIRCUIT

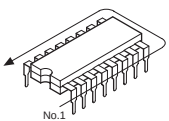
SL-1210M5G(E,EB,GN,PP)
DRIVE CONTROL,POWER SUPPLY,REGULATOR,
PITCH CONTROL(1),PITCH CONTROL(2),SPEED SELECTOR,
STROBE ILLUMINATOR ,STYLUS ILLUMINATOR SWITCH,
OUTPUT CIRCUIT


For [PP] area.
B POWER SUPPLY CIRCUIT
S601 (POWER)
OFF
ON
C
F1 125V250mA
T1
F2 125V1.2A
C601 0.047
R601 1/2W4.7
AC120V (60Hz)
AC 30V
AC LINE 110-120V /220-240V 50/60Hz
A DRIVE CONTROL CIRCUIT
IC302 TC4011BP PITCH CONTROL ON/OFF SELECT
IC502 NJM78M05FA REGULATOR
IC501 C2BAED000009 PITCH CONTROL
Q501 UN4115TA RESET
Q202 2SD637-QRS LED DRIVE
D401 B3AFA0000034 (RESET)
D301 MA4051MTA
D502 LMW9A8BYB0A1 (±8)
D501 LMW9A8BYB0A1 (±16)
D506 MA4030LTA
D204A MA165TA5
S501 (RESET)
S502 (PITCH SELECT)
S203 (START/STOP)
D201,202 SVDPR3902S-9
VR303 (PITCH ADJ.)
VR501
R508A 1K
PITCH CONTROL GAIN ADJ.
VR201 50K(B)
BRAKE ADJ.
X501 (4.13MHz)
X201 (4.13MHz)
CN102
CN103
CN104
CN105
CN106
FW104
FW105
FW106
TP11
TP12
TP16
TP17
TP18
TP19
TP20
TP23
TP24
TP27
GND
21V
5V
STOP
ROTATION
S203 Push
VO
PO
FAO
FAI
ECR
M
S.S
T
BI
FGG
FNC
SRB
Vcc
VCN
GND
OS1
OS2
FO
Vcc
VREF
AVss
CNVss
/RESET
XIN
XOUT
Vss
P30/ AN0
P02/ SCLK2
P07/AN3
P16/(LED6)
P17/(LED7)
H PITCH CONTROL(1) CIRCUIT
F PITCH CONTROL(2) CIRCUIT
E SPEED SELECTOR CIRCUIT

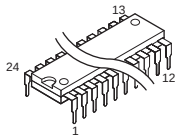


SL-1210M5G(E,EB,GN,PP)
DRIVE CONTROL,POWER SUPPLY,REGULATOR,
PITCH CONTROL(1),PITCH CONTROL(2),SPEED SELECTOR,
STROBE ILLUMINATOR ,STYLUS ILLUMINATOR SWITCH,
OUTPUT CIRCUIT

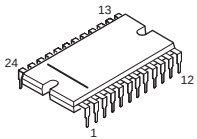
TC4011BP	14PIN
C2BAED000009	42PIN



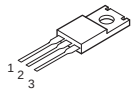
AN6680



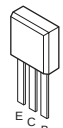
AN6675



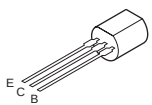
NJM78M05FA



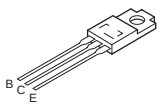
UN4115TA



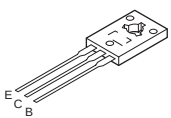
2SC2458GR



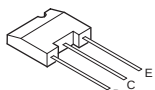
2SD126507



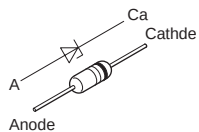
2SC1846-QRS



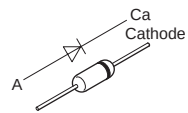
2SD637-QRS



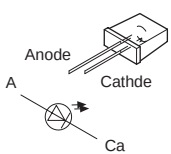
MA4051MTA
MA4030LTA



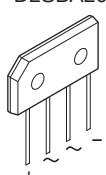
MA165TA5



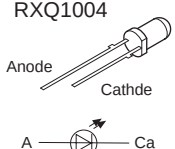
B3AFA0000034



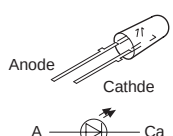
D2SBA20

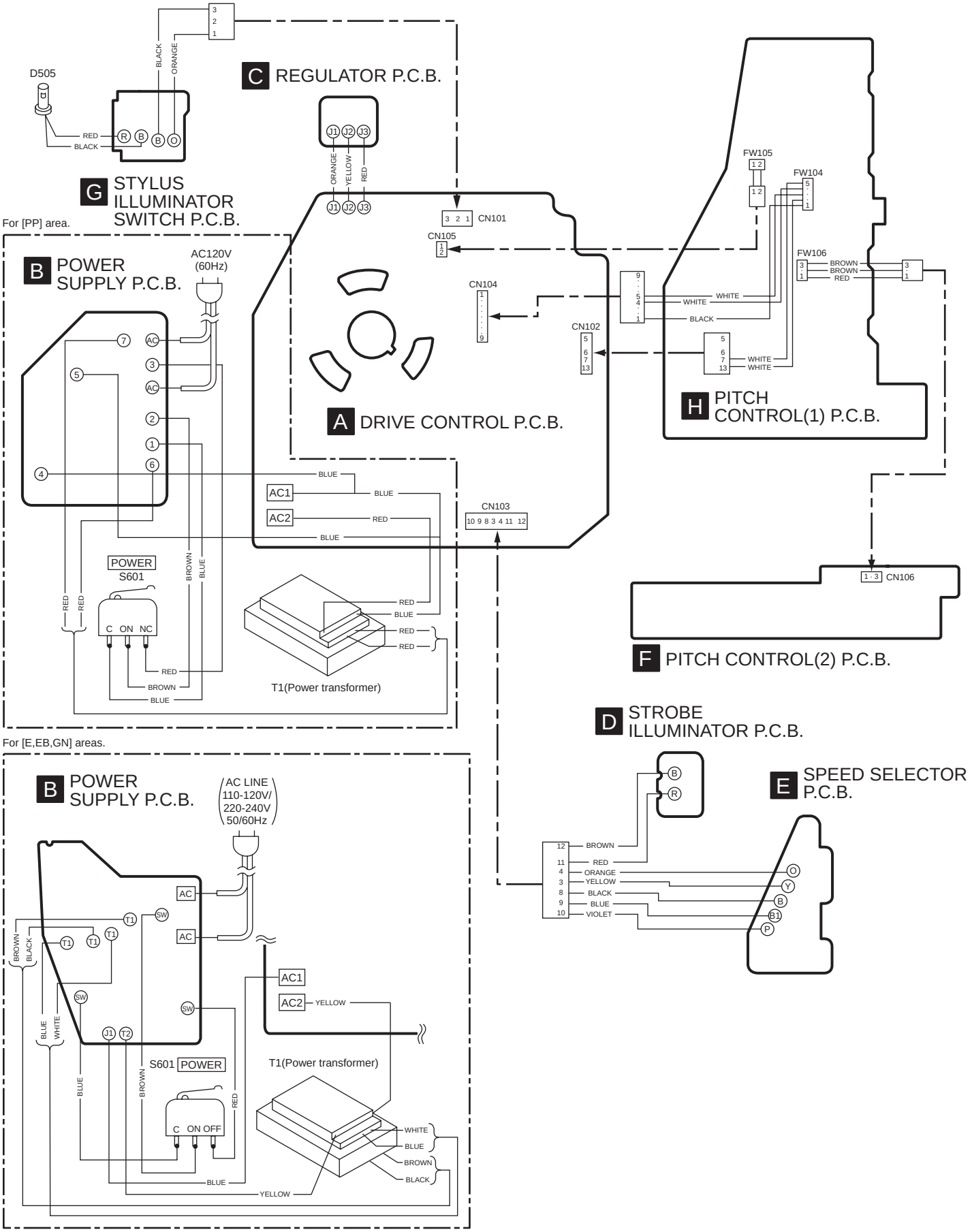


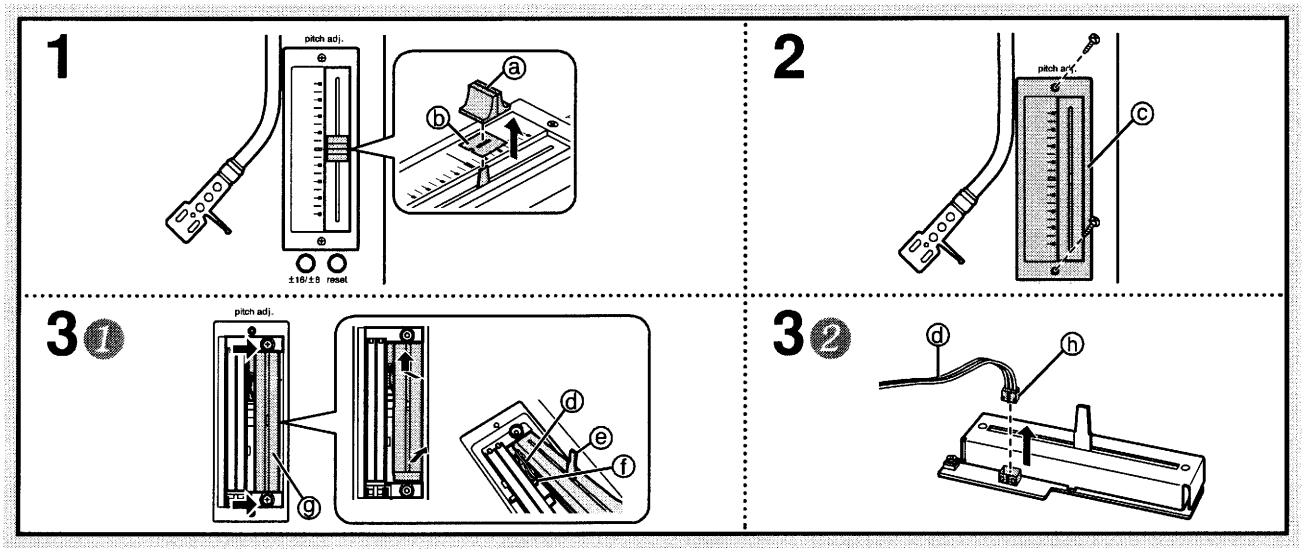
SVDPR3902S-9
LN21CAL
RXQ1004



LMW9A8BYB0A1




C REGULATOR P.C.B.
D505
BLACK
ORANGE
RED
BLACK
G STYLUS ILLUMINATOR SWITCH P.C.B.
ORANGE
YELLOW
RED
CN101
CN105
CN104
CN102
CN103
10 9 8 3 4 11 12
FW105
FW104
FW106
BROWN
BROWN
RED
WHITE
WHITE
BLACK
WHITE
WHITE
A DRIVE CONTROL P.C.B.
H PITCH CONTROL(1) P.C.B.
For [PP] area.
B POWER SUPPLY P.C.B.
AC120V (60Hz)
AC1
AC2
BLUE
BLUE
RED
BLUE
POWER S601
C ON NC
RED
BROWN
BLUE
RED
RED
RED
BLUE
RED
RED
T1(Power transformer)
CN106
F PITCH CONTROL(2) P.C.B.
D STROBE ILLUMINATOR P.C.B.
E SPEED SELECTOR P.C.B.
BROWN
RED
ORANGE
YELLOW
BLACK
BLUE
VIOLET
O
Y
B
B1
P
For [E,EB,GN] areas.
B POWER SUPPLY P.C.B.
AC LINE 110-120V/ 220-240V 50/60Hz
AC
AC
AC1
AC2
YELLOW
BROWN
BLACK
BLUE
WHITE
BLUE
BROWN
BLUE
RED
S601 POWER
C ON OFF
T1(Power transformer)
WHITE
BLUE
BROWN
BLACK
BLUE
YELLOW



Turntable system pitch adj. slider replacement instructions.

You can remove the pitch adj. slider if necessary. Disconnect from the AC power source.

1 Remove the pitch adj. slider and protective pad.

ⓐ Slider knob
ⓑ Protective pad

2 Unscrew the two screws (keep them handy) and remove the pitch indicator cover.

ⓒ Pitch indicator cover

3 Remove the old pitch adj. slider unit.

1 Unscrew the two screws (keep them handy) and remove the pitch adj. slider.

Holding the slider lever
1. Rest the slider on its bottom.
2. Move forward as far as possible.
3. Lift up the end of the slider closest to you and pull out.

Move wires out of the way when removing the slider.

ⓓ Wires
ⓔ Lever
ⓕ Edge
ⓖ Pitch adj. slider

2 Remove the connection from the pitch adj. slider while holding the connector.

ⓗ Connector

4 Place in a new pitch adj. slider.

5 Re-attach the pitch indicator cover.

6 Re-attach the protective pad and slider knob.

Consult with a qualified dealer when purchasing the pitch adj. slider.

Use the following product number when asking for the replacement.

Product reference No. RFKBL120M5GK.